

COMMONWEALTH of VIRGINIA

Douglas W. Domenech Secretary of Natural Resources

DEPARTMENT OF ENVIRONMENTAL QUALITY
Blue Ridge Regional Office

Lynchburg Office 7705 Timberlake Road Lynchburg, Virginia 24502 (434) 582-5120 Fax (434) 582-5125 www.deq.virginia.gov

David K. Paylor Director

Robert J. Weld Regional Director

Roanoke Office 3019 Peters Creck Road Roanoke, Virginia 24019 (540) 562-6700 Fax (540) 562-6725

January 15, 2013

Mr. Charles D. Holley Vice President-F&H System Operations Virginia Electric & Power Company Dominion – Altavista Power Station 5000 Dominion Boulevard Glen Allen, Virginia 23060

> Location: Campbell County Registration No.: 30859

AIRS ID Number: 51-031-00156

Dear Mr. Holley:

Attached is a Title V permit to operate your electricity generating facility pursuant to 9 VAC 5 Chapter 80 of the Virginia <u>Regulations for the Control and Abatement of Air Pollution</u>. This permit incorporates provisions from the NSR permit dated May 22, 2012.

This permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and civil penalty. <u>Please read all conditions carefully.</u>

This approval to operate does not relieve Virginia Electric and Power Company of the responsibility to comply with all other local, state, and federal permit regulations.

Issuance of this permit is a case decision. The <u>Regulations</u>, at 9 VAC 5-170-200, provide that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this permit is mailed or delivered to you. Please consult that and other relevant provisions for additional requirements for such requests.

Additionally, as provided by Rule 2A:2 of the Supreme Court of Virginia, you have 30 days from the date you actually received this permit or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal to court by filing a Notice of Appeal with:

Mr. David K. Paylor, Director Department of Environmental Quality P. O. Box 1105 Richmond, VA 23218

In the event that you receive this permit by mail, three days are added to the period in which to file an appeal. Please refer to Part Two A of the Rules of the Supreme Court of Virginia for additional information including filing dates and the required content of the Notice of Appeal.

If you have any questions concerning this permit, please contact Tom Berkeley at (434) 582-6205.

Sincerely,

Robert J. Weld Regional Director

Attachment: Permit

cc: Director, OAPP (electronic file submission)

Manager, Data Analysis (electronic file submission)

Chief, Air Enforcement Branch (3AP13), U.S. EPA, Region III

L. Labrie, Dominion (electronic file submission)

Manager/Inspector, Air Compliance: F. Adams/N. Wright (electronic file submission)



COMMONWEALTH of VIRGINIA

Douglas W. Domenech Secretary of Natural Resources

Lynchburg Office 7705 Timberlake Road Lynchburg, Virginia 24502 (434) 582-5120 Fax (434) 582-5125

DEPARTMENT OF ENVIRONMENTAL QUALITY Blue Ridge Regional Office

www.deq.virginia.gov

David K. Paylor Director

Robert J. Weld Regional Director

Roanoke Office 3019 Peters Creek Road Roanoke, Virginia 24019 (540) 562-6700 Fax (540) 562-6725

Federal Operating Permit Article 3

This permit is based upon Federal Clean Air Act acid rain permitting requirements of Title IV. federal operating permit requirements of Title V; and Chapter 80, Article 3 and Chapter 140 of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1. Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, 9 VAC 5-80-360 through 9 VAC 5-80-700, 9 VAC 5-140-1010 et seq., 9 VAC 5-140-2010 et seg., 9 VAC 5-140-3010 et seg. of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name:

Dominion Generation Facility Name:

Facility Location:

Altavista Power Station (APS) 104 Wood Lane

Altavista, Virginia

Registration Number:

30859

Permit Number:

BRRO30859

Dominion Generation – Altavista Power Station Permit Number: BRRO30859

Signature Date: January 15, 2013

Page 2

This permit includes the following enforcement programs:

Federally Enforceable Requirements Clean Air Act (Sections I through XI and XIII)
Federally Enforceable Requirements Title IV Acid Rain (Section XII)
Federally Enforceable Requirements - Clean Air Interstate Rule (Section XIV)

Permit Effective Date:

January 1, 2009

Significant Modification Date:

January 15, 2013

Permit Expiration Date:

December 31, 2013

Robert J. Weld Regional Director

Table of Contents, 2 pages Permit Conditions, 46 pages

Attachment A, Title IV Phase II Acid Rain Permit Application, 10 pages

Attachment B, CAIR Permit, 12 pages

Attachment C, Source Testing Report Format, 1 page

Table of Contents

| I. | FACILITY INFORMATION | 1 |
|--|--|-----------------------|
| II. | EMISSION UNITS | 2 |
| III. | PRIMARY BOILERS REQUIREMENTS - (001 AND 002) | 5 |
| A. | LIMITATIONS-PRIMARY BOILERS | 5 |
| В. | MONITORING-PRIMARY BOILERS | 7 |
| C. | RECORDKEEPING-PRIMARY BOILERS | |
| D. | TESTING-PRIMARY BOILERS | |
| E. | REPORTING-PRIMARY BOILERS | |
| IV. | AUXILIARY BOILER REQUIREMENTS - (003) | |
| Α. | LIMITATIONS-AUXILIARY BOILER | |
| В. | MONITORING-AUXILIARY BOILER | |
| C. | RECORDKEEPING-AUXILIARY BOILER | |
| D. | TESTING-AUXILIARY BOILER | |
| Ε. | REPORTING-AUXILIARY BOILER | |
| V. | COMBINED BOILER LIMITATIONS | |
| | LIMITATIONS-COMBINED BOILERS | |
| | DIESEL ENGINES REQUIREMENTS - (005 AND 006) | |
| | LIMITATIONS-DIESEL ENGINES | |
| • | VAC 5-60-95, 9 VAC 5-60-100, 9 VAC 5-80-110 AND 40 CFR 63 SUBPART ZZZZ) | |
| B. | | |
| C. | TESTING-DIESEL ENGINES | |
| | REPORTING-DIESEL ENGINES | |
| | | |
| V 11. | BIOMASS, ASH & LIME HANDLING REQUIREMENTS - (010 THROUG | |
| | 020 THROUGH 023, 025, AND 101 THROUGH 104-11) | 26 |
| A. | 020 THROUGH 023, 025, AND 101 THROUGH 104-11)Limitations-Biomass, Ash & Lime Handling | 26 |
| A. B. | 020 THROUGH 023, 025, AND 101 THROUGH 104-11) | 26 26 28 |
| A. B. C. | 020 THROUGH 023, 025, AND 101 THROUGH 104-11) | 262829 |
| A. B. C. D. | 020 THROUGH 023, 025, AND 101 THROUGH 104-11) LIMITATIONS-BIOMASS, ASH & LIME HANDLING MONITORING-BIOMASS, ASH & LIME HANDLING RECORDKEEPING-BIOMASS, ASH & LIME HANDLING TESTING-BIOMASS, ASH & LIME HANDLING | |
| A. B. C. D. E. | 020 THROUGH 023, 025, AND 101 THROUGH 104-11) LIMITATIONS-BIOMASS, ASH & LIME HANDLING MONITORING-BIOMASS, ASH & LIME HANDLING RECORDKEEPING-BIOMASS, ASH & LIME HANDLING TESTING-BIOMASS, ASH & LIME HANDLING REPORTING-BIOMASS, ASH & LIME HANDLING | |
| A. B. C. D. E. VIII. | 020 THROUGH 023, 025, AND 101 THROUGH 104-11) | |
| A. B. C. D. E. VIII. IX. | 020 THROUGH 023, 025, AND 101 THROUGH 104-11) LIMITATIONS-BIOMASS, ASH & LIME HANDLING MONITORING-BIOMASS, ASH & LIME HANDLING RECORDKEEPING-BIOMASS, ASH & LIME HANDLING TESTING-BIOMASS, ASH & LIME HANDLING REPORTING-BIOMASS, ASH & LIME HANDLING DISTILLATE FUEL OIL STORAGE TANK REQUIREMENTS - (024) FACILITY WIDE CONDITIONS | |
| A. B. C. D. E. VIII. IX. | 020 THROUGH 023, 025, AND 101 THROUGH 104-11) LIMITATIONS-BIOMASS, ASH & LIME HANDLING MONITORING-BIOMASS, ASH & LIME HANDLING RECORDKEEPING-BIOMASS, ASH & LIME HANDLING TESTING-BIOMASS, ASH & LIME HANDLING REPORTING-BIOMASS, ASH & LIME HANDLING DISTILLATE FUEL OIL STORAGE TANK REQUIREMENTS - (024) FACILITY WIDE CONDITIONS REQUIREMENTS-FACILITY WIDE | |
| A. B. C. D. E. VIII. IX. A. | 020 THROUGH 023, 025, AND 101 THROUGH 104-11) LIMITATIONS-BIOMASS, ASH & LIME HANDLING MONITORING-BIOMASS, ASH & LIME HANDLING RECORDKEEPING-BIOMASS, ASH & LIME HANDLING TESTING-BIOMASS, ASH & LIME HANDLING REPORTING-BIOMASS, ASH & LIME HANDLING DISTILLATE FUEL OIL STORAGE TANK REQUIREMENTS - (024) FACILITY WIDE CONDITIONS REQUIREMENTS-FACILITY WIDE INSIGNIFICANT EMISSION UNITS | |
| A. B. C. D. E. VIII. IX. A. X. | 020 THROUGH 023, 025, AND 101 THROUGH 104-11). LIMITATIONS-BIOMASS, ASH & LIME HANDLING | |
| A. B. C. D. E. VIII. IX. A. X. XI. | 020 THROUGH 023, 025, AND 101 THROUGH 104-11). LIMITATIONS-BIOMASS, ASH & LIME HANDLING. MONITORING-BIOMASS, ASH & LIME HANDLING. RECORDKEEPING-BIOMASS, ASH & LIME HANDLING. TESTING-BIOMASS, ASH & LIME HANDLING. REPORTING-BIOMASS, ASH & LIME HANDLING. DISTILLATE FUEL OIL STORAGE TANK REQUIREMENTS - (024) FACILITY WIDE CONDITIONS. REQUIREMENTS-FACILITY WIDE. INSIGNIFICANT EMISSION UNITS. PERMIT SHIELD & INAPPLICABLE REQUIREMENTS. TITLE IV REQUIREMENTS. | |
| A. B. C. D. E. VIII. IX. A. XI. XII. A. | 020 THROUGH 023, 025, AND 101 THROUGH 104-11). LIMITATIONS-BIOMASS, ASH & LIME HANDLING. MONITORING-BIOMASS, ASH & LIME HANDLING. RECORDKEEPING-BIOMASS, ASH & LIME HANDLING. TESTING-BIOMASS, ASH & LIME HANDLING. REPORTING-BIOMASS, ASH & LIME HANDLING. DISTILLATE FUEL OIL STORAGE TANK REQUIREMENTS - (024) FACILITY WIDE CONDITIONS. REQUIREMENTS-FACILITY WIDE. INSIGNIFICANT EMISSION UNITS PERMIT SHIELD & INAPPLICABLE REQUIREMENTS. TITLE IV REQUIREMENTS. STATUTORY AND REGULATORY AUTHORITIES. | |
| A. B. C. D. E. VIII. IX. A. XI. XII. A. B. | 020 THROUGH 023, 025, AND 101 THROUGH 104-11). LIMITATIONS-BIOMASS, ASH & LIME HANDLING | |
| A. B. C. D. E. VIII. IX. A. XI. A. B. C. | 020 THROUGH 023, 025, AND 101 THROUGH 104-11) LIMITATIONS-BIOMASS, ASH & LIME HANDLING MONITORING-BIOMASS, ASH & LIME HANDLING RECORDKEEPING-BIOMASS, ASH & LIME HANDLING TESTING-BIOMASS, ASH & LIME HANDLING REPORTING-BIOMASS, ASH & LIME HANDLING DISTILLATE FUEL OIL STORAGE TANK REQUIREMENTS - (024) FACILITY WIDE CONDITIONS REQUIREMENTS-FACILITY WIDE INSIGNIFICANT EMISSION UNITS PERMIT SHIELD & INAPPLICABLE REQUIREMENTS TITLE IV REQUIREMENTS STATUTORY AND REGULATORY AUTHORITIES SO ₂ ALLOWANCE ALLOCATIONS AND NOX REQUIREMENTS FOR AFFECTED UNITS ADDITIONAL REQUIREMENTS, COMMENTS, NOTES, AND JUSTIFICATIONS | |
| A. B. C. D. E. VIII. IX. A. XI. A. XII. A. B. C. XIII. | DISTILLATE FUEL OIL STORAGE TANK REQUIREMENTS - (024) FACILITY WIDE CONDITIONS REQUIREMENTS - MAPPLICABLE REQUIREMENTS TITLE IV REQUIREMENTS SO ₂ ALLOWANCE ALLOCATIONS AND NOX REQUIREMENTS FOR AFFECTED UNITS ADDITIONAL REQUIREMENTS, COMMENTS, NOTES, AND JUSTIFICATIONS GENERAL CONDITIONS CIMITATIONAL MAPPLICABLE REQUIREMENTS - (024) | |
| A. B. C. D. E. VIII. IX. A. XI. XII. A. B. C. XIIII. A. | DISTILLATE FUEL OIL STORAGE TANK REQUIREMENTS - (024) REQUIREMENTS-FACILITY WIDE INSIGNIFICANT EMISSION UNITS. PERMIT SHIELD & INAPPLICABLE REQUIREMENTS TITLE IV REQUIREMENTS STATUTORY AND REGULATORY AUTHORITIES. SO ₂ ALLOWANCE ALLOCATIONS AND NOX REQUIREMENTS FOR AFFECTED UNITS. ADDITIONAL REQUIREMENTS, COMMENTS, NOTES, AND JUSTIFICATIONS GENERAL CONDITIONS FEDERAL ENFORCEABILITY LIMITATIONAL THE TOTAL | |
| A. B. C. D. E. VIII. IX. A. XI. A. B. C. XIII. A. B. B. | DISTILLATE FUEL OIL STORAGE TANK REQUIREMENTS - (024) REQUIREMENTS-FACILITY WIDE INSIGNIFICANT EMISSION UNITS. PERMIT SHIELD & INAPPLICABLE REQUIREMENTS STATUTORY AND REGULATORY AUTHORITIES. SO2 ALLOWANCE ALLOCATIONS AND NOX REQUIREMENTS FOR AFFECTED UNITS. ADDITIONAL REQUIREMENTS, COMMENTS, NOTES, AND JUSTIFICATIONS GENERAL CONDITIONS FEDERAL ENFORCEABILITY PERMIT EXPIRATION | |
| A. B. C. D. E. VIII. IX. A. XI. A. B. C. XIII. A. B. C. C. XIII. | DISTILLATE FUEL OIL STORAGE TANK REQUIREMENTS - (024) REQUIREMENTS-FACILITY WIDE INSIGNIFICANT EMISSION UNITS. PERMIT SHIELD & INAPPLICABLE REQUIREMENTS TITLE IV REQUIREMENTS STATUTORY AND REGULATORY AUTHORITIES. SO ₂ ALLOWANCE ALLOCATIONS AND NOX REQUIREMENTS FOR AFFECTED UNITS. ADDITIONAL REQUIREMENTS, COMMENTS, NOTES, AND JUSTIFICATIONS GENERAL CONDITIONS FEDERAL ENFORCEABILITY LIMITATIONAL THE TOTAL | |

| Page. | 2 |
|-------|---|
| ı ugu | ~ |

| | F. | PERMIT EXPIRATION | 35 |
|---|-------|---|----|
| | G. | PERMIT EXPIRATION | 36 |
| | H. | RECORDKEEPING AND REPORTING | 36 |
| | I. | RECORDKEEPING AND REPORTING | 36 |
| | J. | RECORDKEEPING AND REPORTING | 36 |
| | K. | ANNUAL COMPLIANCE CERTIFICATION | 37 |
| | L. | PERMIT DEVIATION REPORTING | 38 |
| | M. | FAILURE/MALFUNCTION REPORTING | 38 |
| | N. | FAILURE/MALFUNCTION REPORTING | 38 |
| | O. | FAILURE/MALFUNCTION REPORTING | 39 |
| | P. | FAILURE/MALFUNCTION REPORTING | 39 |
| | Q. | SEVERABILITY | 39 |
| | | DUTY TO COMPLY | |
| | | NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE | |
| | | PERMIT MODIFICATION | |
| | | PROPERTY RIGHTS | |
| | | DUTY TO SUBMIT INFORMATION | |
| | | DUTY TO SUBMIT INFORMATION | |
| | | DUTY TO PAY PERMIT FEES | |
| | | FUGITIVE DUST EMISSION STANDARDS | |
| | | STARTUP, SHUTDOWN, AND MALFUNCTION | |
| | | ALTERNATIVE OPERATING SCENARIOS | |
| | | INSPECTION AND ENTRY REQUIREMENTS | |
| | | REOPENING FOR CAUSE | |
| | | PERMIT AVAILABILITY | |
| | | TRANSFER OF PERMITS | |
| | | TRANSFER OF PERMITS | |
| | | TRANSFER OF PERMITS | |
| | | MALFUNCTION AS AN AFFIRMATIVE DEFENSE | |
| | | MALFUNCTION AS AN AFFIRMATIVE DEFENSE | |
| | | MALFUNCTION AS AN AFFIRMATIVE DEFENSE. | |
| | | MALFUNCTION AS AN AFFIRMATIVE DEFENSE | |
| | | PERMIT REVOCATION OR TERMINATION FOR CAUSE | |
| | | DUTY TO SUPPLEMENT OR CORRECT APPLICATION | |
| | | STRATOSPHERIC OZONE PROTECTION | |
| | | CHANGES TO PERMITS FOR EMISSIONS TRADING | |
| | | EMISSIONS TRADING | |
| | | VIOLATION OF AMBIENT AIR QUALITY STANDARD | |
| X | IV. (| CLEAN AIR INTERSTATE RULE (CAIR) REQUIREMENTS | 46 |
| | | | |

I. Facility Information

Permittee

Dominion Generation 5000 Dominion Boulevard Glen Allen, VA 23060

Responsible Official

David W. Faison

Dominion – Altavista Power Station Director

Acid Rain Designated Representative

Charles D. Holley Vice President-F&H System Operations USEPA AAR ID number 002099

CAIR Designated Representative

(same as AR Designated Representative)

Facility

Altavista Power Station 104 Wood Lane Altavista, VA 24517

Contact Person

Cathy C. Taylor Director, Electric Environmental Services (804) 273-2929

County-Plant Identification Number: 51-031-00156

ORIS Code: 10773

NATS Facility Identification Number: 010773000001, 010773000002

Facility Description: 2012 NAISC / SIC Codes: 221117 / 4911 – The Altavista Power Station (APS) operates two 394 MMBtu/hr biomass-fired, spreader stoker boilers to generate electricity. The facility uses associated biomass, lime, ash, and fuel oil handling systems to support its operations, as well as two small diesel engine sources used to provide emergency capability. Natural gas or No. 2 fuel oil is used for startup. One 146.4 MMBTU/hr natural gas/No. 2 oil fired auxiliary boiler is located at APS to provide steam during main boiler startup if needed.

II. Emission Units

Equipment to be operated consists of:

| Emission Unit ID | Stack ID | Emission Unit Description* | Size/Rated Capacity | Pollution Control Device Description (PCD) | PCD ID | Pollutant Controlled | Applicable Permit Date |
|---------------------|------------------|---|------------------------|--|--------------|--|---------------------------|
| Fuel Burnin | g Equipme | nt | - | | | | <u> </u> |
| 001 | 001 | Primary boiler (Stoker) - fueled with biomass, No.2 F.O., and/or nat'l gas to generate process steam and electricity [2012] | 394 MMBtu/hr | Ammonia injection, Dry lime scrubber, Fabric filter | EC-1 (a,b,c) | NO _x ,SO ₂ , PM/PM10/ PM2.5, trace metals | 5/22/2012 |
| 002 | 001 | Primary boiler (Stoker) - fueled with biomass, No.2 F.O. and/or nat'l gas to generate process steam and electricity [2012] | 394 MMBtu/hr | Ammonia injection, Dry lime scrubber, Fabric filter | EC-2 (a,b,c) | NO _x ,SO ₂ , PM/PM10/ PM2.5, trace metals | 5/22/2012 |
| 003 | 003 | Auxiliary boiler-fueled with nat'l gas or No.2 F.O. to generate process steam | 146.4 MMBtu/hr | Low NOx burners/Flue gas recirculation | EC-3 (a, b) | NO _x | 5/22/2012 |
| 005 | 005 | Emergency Diesel Feedwater Pump [prior to 2006] | 126 BHP | | | | 5/22/2012 |
| 006 | 006 | Diesel Firewater Pump Engine [prior to 2006] | 208 BHP | | | | 5/22/2012 |
| Biomass, As | h and Lime | Handling Equipment | | | | · | |
| 010 | 010 (a,b,c,d) | storage silos (4) | 180 tons (ea.) | Bin vent filter | EC-10 | PM/PM10/PM2.5 | 5/22/2012 |
| 011 | 011 | Boiler ash conveyor blower system A | 27.8 tons | Fabric filter | EC-11 | PM/PM10/PM2.5 | 5/22/2012 |
| 012 | 012 | Boiler ash conveyor blower system B | 27.8 tons | Fabric filter | EC12 | PM/PM10/PM2.5 | 5/22/2012 |
| 013 | 013 | Boiler ash conveyor blower system C | 27.8 tons | Fabric filter | EC-13 | PM/PM10/PM2.5 | 5/22/2012 |
| 014 | 014 | Recycled boiler ash storage bin | 26.5 tons | Bin vent filter | EC-14 | PM/PM10/PM2.5 | 5/22/2012 |
| 015 | 015 | Ash storage silo | 530 tons | Bin vent filter | EC-15 | PM/PM10/PM2.5 | 5/22/2012 |
| 016 | Fugitive | Ash unloading feeder (DustMaster mixer) | 80 tph | Ash conditioning system (water spraying) | EC-16 | PM/PM10/PM2.5 | 5/22/2012 |
| 017 | 017 | Pebble lime storage silo | 135 tons | Bin vent filter | EC-17 | PM/PM10/PM2.5 | 5/22/2012 |
| 020 | 020 (a,b) | Wood storage silo | 100 tons | Bin vent filter, fabric filter | EC-20 a,b | PM/PM10/PM2.5 | 5/22/2012 |
| 021 (a,b) | 021 (a,b) | Wood pulverizers, No. 1 and 2 | 3.5 tph | Fabric filter | EC-21 a,b | PM/PM10/PM2.5 | 5/22/2012 |
| 022 | Fugitive | Wood emergency loading spout | 20 tph | | | | 5/22/2012 |

Signature Date: January 15, 2013 Page 3

| Emission Unit ID | Stack ID | Emission Unit Description* | Size/Rated Capacity | Pollution Control Device Description (PCD) | PCD ID | Pollutant Controlled | Applicable Permit Date |
|---------------------|-------------|---|------------------------|---|--------|-------------------------|---------------------------|
| 023 | 023 | Wood conveying to emergency loading | 20 tph | Bin vent filter | EC-23 | PM/PM10/PM2.5 | 5/22/2012 |
| 024 | 024 | No.2 Fuel Oil Storage Tank | 100,000 gal | | | | 5/22/2012 |
| 025 | Fugitive | Wood Chip Handling Equipment [2008] | 500 tons per hour | | | | 5/22/2012 |
| 101 | Fugitive | Biomass truck tipper (2) to receiving hoppers (2) [2012] | 269 tons/hr | Partial enclosure | | PM/PM10/PM2.5 | 5/22/2012 |
| 102 | Fugitive | Biomass storage pile [2012] | $3x10^6 \text{ ft}^3$ | | | | 5/22/2012 |
| 103 | Fugitive | Biomass stacker [2012] | 269 tons/hr | | | | 5/22/2012 |
| 104-1&2 | Fugitive | Truck tipper reclaimers 1&2 to Conveyor A tranfer point [2012] | 269 tons/hr | Partial enclosure | | PM/PM10/PM2.5 | 5/22/2012 |
| 104-3 | Fugitive | Conveyor A to B transfer point [2012] | 269 tons/hr | Partial enclosure | | PM/PM10/PM2.5 | 5/22/2012 |
| 104-4 | Fugitive | Conveyor C to Diverter Gate #2 transfer point [2012] | 269 tons/hr | Partial enclosure | | PM/PM10/PM2.5 | 5/22/2012 |
| 104-5 | Fugitive | Conveyor D to Stacker/reclaimer transfer point [2012] | 269 tons/hr | Partial enclosure | | PM/PM10/PM2.5 | 5/22/2012 |
| 104-6 | Fugitive | Reclaimer to Conveyor E Transfer point [2012] | 90 tons/hr | Partial enclosure | | PM/PM10/PM2.5 | 5/22/2012 |
| 104-7 | Fugitive | Emergency reclaimer to Conveyor E transfer point [2012] | 90 tons/hr | Partial enclosure | | PM/PM10/PM2.5 | 5/22/2012 |
| 104-8 | Fugitive | Diverter Gate #2 to Conveyor E transfer point [2012] | 90 tons/hr | Partial enclosure | | PM/PM10/PM2.5 | 5/22/2012 |
| 104-9 | Fugitive | Conveyor E to Conveyor F transfer point [2012] | 90 tons/hr | Partial enclosure | | PM/PM10/PM2.5 | 5/22/2012 |
| 104-10 | Fugitive | Conveyor F to Conveyor G transfer point [2012] | 90 tons/hr | Partial enclosure | | PM/PM10/PM2.5 | 5/22/2012 |
| 104-11 | Fugitive | Conveyor G to fuel Bunker Drag Chain transfer point [2012] | 90 tons/hr | Partial enclosure | | PM/PM10/PM2.5 | 5/22/2012 |
| 105 | Fugitive | Cooling Tower | | | | | 5/22/2012 |

Dominion Generation - Altavista Power Station

Permit Number: BRRO30859

Signature Date: January 15, 2013

Page 4

^{*}Date of construction for all equipment is June 1990 unless otherwise noted. The size/rated capacity is provided for informational purposes only, and is not an applicable requirement.

III. Primary Boilers Requirements - (001 and 002)

A. Limitations-Primary Boilers

- 1. Particulate emissions from the primary boilers (001,002) shall be controlled by an inline multiple cyclone, a lime-water injection spray dryer, and a fabric filter rated at 99.9 percent control efficiency. The control systems shall be provided with adequate access for inspection. The fabric filter may be bypassed during boiler start-ups to alleviate potential moisture damage to the fabric filter at low start-up temperatures. Each fabric filter shall be equipped with a device to continuously measure pressure drop.
 - (9 VAC 5-80-490, 40 CFR 60.43b, and Conditions 3 and 56 of NSR Permits dated 5/22/2012)
- 2. Sulfur dioxide emissions from the primary boilers (001,002) shall be controlled by a lime-water injection spray dryer. The control system shall be provided with adequate access for inspection.
 - (9 VAC 5-80-490, 40 CFR 60.42b, and Conditions 7 and 60 of NSR Permits dated 5/22/2012).
- 3. Nitrogen oxide emissions from the primary boilers shall be controlled by continuous biomass feed systems, staged combustion low excess air, and selective non-catalytic reduction.
 - (9 VAC 5-80-490 and Conditions 8 and 61 of NSR Permits dated 5/22/2012).
- 4. Each primary boiler shall not operate more than 8,400 hours per year. (9 VAC 5-80-490 and Conditions 17 and 70 of NSR Permits dated 5/22/2012).
- 5. The maximum firing rate of each primary boiler shall not exceed 394 x 10⁶ Btu per hour. The total heat input to the primary boilers combined shall not exceed 6,109,480 x 10⁶ Btu per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - (9 VAC 5-80-490 and Conditions 18 and 71 of NSR Permits dated 5/22/2012).

6. Emissions from the operation of <u>each</u> primary boiler shall not exceed the limitations specified below:

| | lbs/10 ⁶ Btu | lbs/hr | tons/yr |
|--|-------------------------|--------------|---------|
| Total PM Including condensable PM Filterable PM only | 0.019 | 12.00 7.5 | 50.41 |
| Total PM10 Including condensable PM Filterable PM10 only | 0.017 | 8.46 6.7 | 35.54 |
| Total PM2.5 Including condensable PM | | 7.92 | 33.28 |
| Sulfur Dioxide | 0.0125 | 4.9 | 19.1 |
| Nitrogen Oxide* | 0.135♦♦ | 53.2 | 206.2 |
| Carbon Monoxide** (CO) | 0.30♦♦ | 118.2 | 458.2 |
| VOC** | | 5.14 | 21.61 |
| Fluorides, as HF | | 0.38 | 1.62 |
| Sulfuric Acid Mist | | 0.89 | |

- * Lower limits may be imposed by the DEQ after review of in-stack testing and optimizing the SNCR system at various loads.
- ** Lower limits may be imposed by the DEQ, after in-stack testing.
- ◆◆ Compliance is determined on 30-day rolling average

(9 VAC 5-80-490, 40 CRF 60.42b, 40 CFR 60.43b, 40 CFR 60.44b and Conditions 21 and 74 of NSR Permits dated 5/22/2012)

- 7. Visible emissions from the boiler stack (001) shall not exceed ten (10) percent opacity, except during one six minute period per hour which shall not exceed twenty (20) percent opacity.
 - (9 VAC 5-80-490, 40 CFR 60.43b, and Conditions 27 and 80 of NSR Permits dated 5/22/2012)
- 8. The approved fuel for the primary boilers is biomass. A change to the fuel may require a permit to modify and operate.
 - (9 VAC 5-80-490 and Conditions 31 and 84 of NSR Permits dated 5/22/2012)

9. The biomass shall meet the specifications below: biomass means those residuals that are akin to traditional cellulosic biomass including forest-derived biomass (e.g., green wood, forest thinnings, clean and unadulterated bark, sawdust, trim, and tree harvesting residuals from logging and sawmill materials) wood collected from forest fire clearance activities, trees and clean wood found in disaster debris, and clean biomass from land clearing operations, each as specified in the definition of Clean Cellulosic Biomass in 40 CFR 241.2, excluding any wood which contains chemical treatments or has affixed thereto paint and/or finishing materials or paper or plastic laminates. Approved biomass is biomass that does not contain contaminants at concentrations not normally associated with virgin biomass

(9 VAC 5-80-490 and Conditions 32 and 85 of NSR Permits dated 5/22/2012)

- 10. The maximum sulfur content of the No. 2 Fuel Oil to be burned in the primary boilers shall not exceed 0.3 percent by weight per shipment. Altavista Power Station shall maintain records of all fuel oil shipments purchased indicating the sulfur content per shipment. These records shall be available on site for inspection by Department personnel. They shall be kept on file for the most current five-year period. (9 VAC 5-80-490, 40 CFR 60.45b, and Conditions 35 and 88 of NSR Permits dated 5/22/2012)
- 11. The (annual rolling) average sulfur content of the No. 2 Fuel Oil to be burned in the primary boilers shall not exceed 0.2 percent by weight. Altavista Power Station shall maintain records of all fuel oil shipments purchased and the annual average sulfur content determined monthly. These records shall be available on site for inspection by Department personnel. They shall be kept on file for the most current five-year period.
 - (9 VAC 5-80-490 and Conditions 36 and 89 of NSR Permits dated 5/22/2012)
- 12. The approved startup fuels for the primary boilers (001 and 002) are natural gas and No. 2 Fuel Oil meeting the sulfur content specified in Conditions III.A.10 and III.A.11. A change in the fuel may require a permit to modify and operate. (9 VAC 5-80-490 and Conditions 48 and 101 of NSR Permits dated 5/22/2012)
- 13. The yearly combustion of No. 2 fuel oil in the primary boilers (001 and 002) shall not exceed a total of 60,000 gallons, calculated monthly as the sum of each consecutive twelve (12) month period.
 - (9 VAC 5-80-490 and Conditions 49 and 102 of NSR Permits dated 5/22/2012)

B. Monitoring-Primary Boilers

materials.

1. Continuous emission monitors shall be installed to measure and record the concentration of opacity, SO₂ (at outlet of each spray dryer), NOx (at each boiler outlet), and CO₂ or O₂ emitted from the primary boilers. They shall be maintained, located and calibrated in accordance with approved procedures (40 CFR 60.13). A 30

day notification prior to the demonstration of continuous monitoring system performance and subsequent notifications are to be submitted to the Blue Ridge Regional Office.

(9 VAC 5-80-490, 40 CFR 60.13, 40 CFR 60.46b, 40 CFR60.48b and Conditions 37 and 90 of NSR Permits dated 5/22/2012)

- 2. The continuous monitoring data generated by the SO₂ and NOx monitors on the primary boilers (001, 002) shall be used to determine compliance with the lbs/MMBtu emission standards on a 30-day rolling average basis. All of the data capture, quality assurance provisions, and reporting requirements of NSPS Subpart Db shall apply.
 - (9 VAC 5-80-110, 40 CFR 60.13, 40 CFR 60 Subpart Db, and Conditions 39 and 92 of NSR Permits dated 5/22/2012)
- 3. For all continuous monitors required by this permit, the continuous monitoring and quality assurance data may, at the discretion of the Board, be used as evidence of violation of the emission standards. These monitors are subject to such data capture requirements and/or quality assurance requirements as may be deemed appropriate by the Board (refer to 40 CFR 60.13 and Appendix B).
 (9 VAC 5-80-490, 40 CFR 60.13, and Conditions 40 and 93 of NSR Permits dated 5/22/2012)
- 4. All continuous emission monitoring systems (CEMS) and continuous opacity monitor (COMS) shall be operated in accordance with the applicable procedures under Performance Specification 1, 2, and 3 of 40 CFR 60, Appendix B. (9 VAC 5-80-490 E and 40 CFR 60.13)
- 5. Continuous Emission Monitoring Systems (CEMS), meeting the design specifications of 40 CFR Part 60, Appendix B Performance Specification 4A, shall be installed to measure and record the emissions of CO from each primary boiler as lbs/MMBtu and lbs/hr. The CEMS shall be installed, calibrated, maintained, audited and operated in accordance with DEQ approved procedures which are equivalent to the requirements of 40 CFR 60.13 and Appendices B and F. Data shall be reduced to 30 day rolling averages per the procedures for NOx contained in 40 CFR 60 Subpart Db. The monitor shall be used to demonstrate compliance with the 30-day rolling average CO emission standard (lb/MMBtu basis) as noted in Condition III.A.6.
 (9 VAC 5-80-490 and Conditions 41 and 94 of NSR Permits dated 5/22/2012)
- 6. A flowmeter shall be used to measure the stack gas airflow from the common stack with the flow apportioned by steam flow rate for each primary boiler utilizing the procedures for Part 75 apportionment. The stack gas flowmeter shall be installed, operated, and maintained in accordance with the provisions of 40 CFR 75 Appendices A and B, with the exception that the relative accuracy test audit (RATA) be performed at least once every four (4) consecutive calendar quarters. The permittee shall submit stack gas flowmeter reports as required by 40 CFR 75 Appendices A and

- B. The CO emissions (lb/hr basis) shall be calculated from data obtained from the CO continuous emissions monitoring system and stack gas flowmeter in accordance to the provisions of 40 CFR 75 Appendix F. These data shall be used to demonstrate compliance with the 30-day rolling average CO emission standard (lb/hr basis) as noted in Condition III.A.6.
- (9 VAC 5-80-490 and Conditions 42 and 95 of NSR Permits dated 5/22/2012)
- 7. Performance evaluations of the CO continuous monitoring systems shall be conducted in accordance with 40 CFR Part 60, Appendix B. Two copies of the performance evaluations report shall be submitted to the Blue Ridge Regional Office within 45 days of the evaluation. The continuous monitoring systems shall be installed and operational prior to conducting initial performance evaluation. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation and calibration of the device. A 30 day notification, prior to the demonstration of continuous monitoring system's performance, and subsequent notifications shall be submitted to the Blue Ridge Regional Office.
 - (9 VAC 5-80-490 and Conditions 43 and 96 of NSR Permits dated 5/22/2012)
- 8. A CEMS quality control program which is equivalent to the requirements of 40 CFR 60.13 and Appendix B and F shall be implemented for the CO continuous monitoring systems.
 - (9 VAC 5-80-490 and Conditions 44 and 97 of NSR Permits dated 5/22/2012)
- 9. All continuous monitoring systems and monitoring devices, as may be applicable for this source type, shall be installed and operational prior to conducting performance tests under 9 VAC 5-50-30. Performance evaluations of the continuous monitoring system shall take place during the performance tests under 9 VAC 5-50-30 or within 30 days thereafter. The Blue Ridge Regional Office shall be furnished with two copies of the report of the performance evaluations within 60 days of the evaluation. (9 VAC 5-80-490, 40 CFR 60.49b, and Conditions 50 and 104 of NSR Permits dated 5/22/2012)
- 10. The permittee shall monitor, operate, calibrate and maintain the fabric filters controlling the primary boilers (001, 002) according to the following:

| Table1: Primary Boilers | Table1: Primary Boilers (Units 001 and 002) Compliance Assurance Monitoring Plan | | | |
|---------------------------|--|--|--|--|
| Description | Two Traveling Grate Stoker boilers fueled with biomass, No. 2 | | | |
| | F.O, and/or Nat'l gas | | | |
| Control Device | Baghouses | | | |
| Applicable Requirement | 9 VAC 5-80-1985 E, 9 VAC 5-50-280, 9 VAC 5-80-1705, 9 VAC | | | |
| | 5-80-1180, and 9 VAC 5-50-260 | | | |
| Regulated Pollutant | PM, PM ₁₀ & PM _{2.5} | | | |
| I. CAM Indicator | Opacity. | | | |
| Measurement Approach | Continuous opacity monitor system (COMS). | | | |
| Monitoring | Continuous | | | |
| Frequency | | | | |
| Justification | COMS satisfies applicable monitoring requirements and | | | |
| | performance specifications as specified in 40 CFR 64.3, "Special | | | |
| | criteria for the use of continuous emission, opacity or predictive | | | |
| | monitoring systems". | | | |
| II. Indicator Range | Continuous operation between 0% - 10% opacity per hour. | | | |
| | Excursion is one six-minute period > 10% opacity. | | | |
| III. Performance Criteria | Location and installation of monitors is per 40 CFR 60, Appendix | | | |
| Data | B, Performance Specification 1 (PS-1). | | | |
| Representativeness | , | | | |
| Verification of | The monitoring device shall be installed and calibrated according | | | |
| Operational Status | to manufacturer's recommendations prior to the initial | | | |
| | performance test. | | | |
| QA/QC Practices and | COMS was installed and evaluated in accordance with PS-1. Zero | | | |
| Criteria | and span drift are checked daily and annual filter audits are | | | |
| | performed in accordance with PS-1. | | | |
| Data Collection | Data are collected by computerized data acquisition and handling | | | |
| Procedures | system (DAHS). The system collects and retains all relevant | | | |
| | opacity data. | | | |
| Averaging period | Six-minute block basis. | | | |

| Table 2: Primary Boilers | s (Units 001, 002) Compliance Assurance Monitoring Plan | | |
|---------------------------|---|--|--|
| Description | Two Traveling Grate Stoker boilers fueled with biomass, No. 2 | | |
| | F.O, and/or Nat'l gas | | |
| Control Device | Baghouses | | |
| Applicable Requirement | 9 VAC 5-80-1985 E, 9 VAC 5-50-280, 9 VAC 5-80-1705, 9 VAC | | |
| | 5-80-1180, and 9 VAC 5-50-260 | | |
| Regulated Pollutant | PM, PM ₁₀ & PM _{2.5} | | |
| I. CAM Indicator | Operational Status of Equipment | | |
| Measurement | Actions taken in the event an opacity excursion is observed: | | |
| Approach | Initiate a cleaning cycle for each baghouse. | | |
| | Monitor the opacity as the baghouses (which are dedicated to either Unit 1 or Unit 2) go through a cleaning cycle. The opacity will drop when the compartment with the problem or leaking bag goes off line to clean. | | |
| · | Once the problem compartment is identified, the compartment is isolated and the issue resolved (e.g., replacement of bags) | | |
| Monitoring | As needed. | | |
| Frequency | | | |
| Justification | These actions are supplemental to the primary indicator of opacity and are taken to determine which of the two units may be causing an opacity excursion. | | |
| II. Indicator Range | Varies; these are work practices. | | |
| III. Performance Criteria | NA. COMS satisfy 40 CFR 64.3(b). | | |
| Data | | | |
| Representativeness | | | |
| Verification of | Verification procedures for operation in accordance with | | |
| Operational Status | manufacturer's recommendations, at a minimum. | | |
| QA/QC Practices and | NA | | |
| Criteria | | | |
| Data Collection | Events and corrective actions are logged as needed. | | |
| Procedures | | | |
| Averaging period | NA | | |

| Table 3: Primary Boilers (| Units 001 and 002) Compliance Assurance Monitoring Plan |
|---|---|
| Description | Two Traveling Grate Stoker boilers fueled with biomass, No. 2 F.O, and/or Nat'l gas |
| Control Device | Lime-water injection spray dryer |
| Applicable Requirement | 9 VAC 5-80-1985 E, 9 VAC 5-50-280, 9 VAC 5-80-1705, 9 VAC 5-80-1180, and 9 VAC 5-50-260 |
| Regulated Pollutant | PM, PM ₁₀ & PM _{2,5} |
| I. CAM Indicator | Exhaust Temperature |
| Measurement Approach | Monitor exhaust gas temperature between spray dryer and baghouse |
| Monitoring Frequency | Continuous |
| Justification | The spray dryer will cool the exhaust gas temperature from a typical value prior to the spray dryer of 400°F to approximately 300°F or less at the baghouse inlet. |
| II. Indicator Range | Exhaust gas temperature at the baghouse inlet (15 minute average) not to exceed value based on temperatures measured during stack testing that demonstrates compliance. |
| III. Performance Criteria Data Representativeness | Location and installation of temperature monitor at inlet duct to baghouse. |
| Verification of Operational Status | Verification procedures, including installation, calibration, and operation in accordance with manufacturer's recommendations, at a minimum. |
| QA/QC Practices and Criteria | Calibrate, maintain, and operate instrumentation using procedures that are based on the manufacturer's specifications, at a minimum. |
| Data Collection Procedures | Data are collected by computerized data acquisition and handling system connected to the plant distributed control system. The system collects and retains all relevant temperature data. |
| Averaging period | One minute data values. |

(9 VAC 5-80-490 and 40 CFR 64.6 (c))

- 11. Compliance Assurance Monitoring (CAM) The permittee shall conduct the monitoring and fulfill the other obligations specified in 40 CFR 64.7 through 40 CFR 64.9.
 - (9 VAC 5-80-490 and 40 CFR 64.6 (c))
- 12. Compliance Assurance Monitoring (CAM) At all times, the permittee shall maintain the monitoring equipment, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

 (9 VAC 5-80-490 and 40 CFR 64.7 (b))

13. Compliance Assurance Monitoring (CAM) - Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the primary boilers are operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of compliance assurance monitoring, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by inadequate maintenance or improper operation are not malfunctions.

(9 VAC 5-80-490, and 40 CFR 64.7 (c))

- 14. Compliance Assurance Monitoring (CAM) Upon detecting an excursion or exceedance, the permittee shall restore operation of the primary boilers (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup and shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator, designated condition, or below the applicable emission limitation or standard, as applicable.

 (9 VAC 5-80-490 and 40 CFR 64.7 (d)(1))
- 15. Compliance Assurance Monitoring (CAM) Determination that acceptable procedures were used in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

 (9 VAC 5-80-490 and 40 CFR 64.7(d)(2))
- 16. Compliance Assurance Monitoring (CAM) If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Blue Ridge Regional Office and, if necessary, submit a proposed modification to this permit to address the necessary monitoring changes.

Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

(9 VAC 5-80-490, 40 CFR 64.7(e), and 40 CFR 64.6 (c))

- 17. Compliance Assurance Monitoring (CAM) If the number of exceedances or excursions exceeds 5 percent duration of the operating time for the primary boilers for a semiannual reporting period, the permittee shall develop, implement and maintain a Quality Improvement Plan (QIP) in accordance with 40 CFR 64.8. If a QIP is required, the permittee shall have it available for inspection at the permitted facility. The QIP initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the permittee shall modify the plan to include procedures for conducting one or more of the following, as appropriate:
 - a. Improved preventative maintenance practices;
 - b. Process operation changes;
 - Appropriate improvements to control methods;
 - d. Other steps appropriate to correct control performance; and
 - e. More frequent or improved monitoring.

(9 VAC 5-80-490 and 40 CFR 64.8(a) and (b))

C. Recordkeeping-Primary Boilers

- 1. The permittee shall obtain the following biomass fuel quality data:
 - a. An analysis of the biomass heat content as-fired at least once per calendar week,
 - b. an ultimate analysis of the biomass as-fired at least once per calendar quarter, and,
 - c. an analysis of the biomass fluoride content as-fired at least once per calendar quarter.
 - d. The permittee shall submit a fuel shipment certification plan at least 60 days prior to facility startup for approval by the Blue Ridge Regional Office. Fuel sampling and analysis, independent of that used for certification, as may be periodically required or conducted by DEQ may be used to determine compliance with the fuel specifications stipulated in this permit.

Details of the sampling procedures shall be arranged with the Blue Ridge Regional Office. Records of fuel quality data shall be available on site for inspection by Department personnel and shall be kept current for the most recent five year period (9 VAC 5-80-490, and Conditions 53 and 107 of NSR Permits dated 5/22/2012)

- 2. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Blue Ridge Regional Office. These records shall include, but are not limited to:
 - a. The annual hours of operation for each boiler calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - b. Records of the maximum firing rate of each primary boiler.
 - c. The total annual heat input to the primary boilers. The annual total shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - d. Continuous monitoring system requirements and emissions monitoring results to demonstrate compliance with Condition III.A.6.
 - e. Stack test results to demonstrate compliance with Condition III.A.6.
 - f. All reports required by 40 CFR 60 Subpart Db for the primary boiler including, but not limited to:
 - (i) reports of excess emission in accordance with 40 CFR 60.49b(h), and
 - (ii) reports containing the steam generating unit operating day information recorded in Condition III.C.2.g(ii).

(40 CFR 60.49b(h) and 40 CFR 60.49b(i))

- g. Any additional information required by 40 CFR 60 Subpart Db for the primary boiler, including but not limited to:
 - (i) records of opacity in accordance with 40 CFR 60.49b(f), and
 - (ii) records required by 40 CFR 60.49b(g) for each steam generating unit operating day.

(40 CFR 60.49b(f) and 40 CFR 60.49b(g))

- h. The daily and annual throughput of distillate oil, natural gas, and biomass, each in units of MMBtu, used for each primary boiler. The annual throughput shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

 (40 CFR 60.49b)
- i. All fuel oil supplier certifications in accordance with Condition IX.A.9 (40 CFR 60.47b and 40 CFR 60.49b)
- j. Verification that the primary boilers and the auxiliary boiler were not operated concurrently in accordance with Condition V.A.1 of this permit.
- k. All biomass fuel quality data in accordance with Condition III.C.1.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years. (9 VAC 5-80-490, 40 CFR 60.49b, and Conditions 115.a through k of the NSR Permits dated 5/22/2012)

3. Compliance Assurance Monitoring (CAM) Recordkeeping - The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan (QIP) required pursuant to 40 CFR 64.8 and any activities undertaken to implement a quality improvement plan (QIP), and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

(9 VAC 5-80-490 and 40 CFR 64.9(b))

D. Testing-Primary Boilers

1. Initial performance tests shall be conducted for SO2, NOx, CO, VOC, Sulfuric Acid Mist, and Fluorides, as HF from each primary boiler. These tests shall be conducted to determine compliance with the emission limits contained in Condition III.A.6. The tests shall be performed, reported, and demonstrate compliance within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility. Tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30 and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410 or 40CFR51, Appendix M as applicable. The details of the tests are to be arranged with the Blue Ridge Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. One copy of the test results shall be submitted to the Blue Ridge Regional Office within 180 days of startup or 45 days after test completion, whichever is earlier, and shall conform to the test report format

Dominion Generation – Altavista Power Station
Permit Number: BRRO30859

Signature Date: January 15, 2013
Page 17

enclosed with this permit. (9 VAC 5-80-490, 40 CFR 60.49b, and Conditions 51 and 105 of NSR Permits dated 5/22/2012)

- 2. For each primary boiler, four performance tests shall be conducted for each of the following pollutants: Filterable PM, Total PM, Filterable PM10, Total PM10, Total PM2.5. Concurrently with each performance test the fuel analyses in accordance with Condition III.C.1 shall be obtained. The performance tests shall be conducted to determine compliance with the emission limits contained in Condition III.A.6. The initial performances tests shall be performed, reported, and demonstrate compliance within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility. Subsequent performance tests shall be performed, at least 75 but not more than 105 days after the directly preceding test. Tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30 and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410 or 40CFR51, Appendix M as applicable. The details of the tests are to be arranged with the Blue Ridge Regional Office. The permittee shall submit a test protocol at least 30 days prior to the initial performance test. The protocol shall cover all performance tests for the respective pollutant. One copy of the initial performance test results shall be submitted to the Blue Ridge Regional Office within 180 days of startup or 45 days after completion of the test, whichever is earlier, and shall conform to the test report format enclosed with this permit. One copy of the test results shall be submitted to the Blue Ridge Regional Office within 45 days after completion of each subsequent performance test and shall conform to the test report format enclosed with this permit. (9 VAC 5-80-490, 40 CFR 60.46b, 40 CFR 60.49b, and Conditions 52 and 106 of NSR Permits dated 5/22/2012)
- 3. Concurrently with the initial performance tests required by Condition III.D.2, Visible Emission Evaluations (VEE) in accordance with 40 CFR Part 60, Appendix A, Method 9, shall also be conducted on the primary boilers. Each test shall consist of 30 sets of 24 consecutive observations (at 15 second intervals) to yield a six minute average. The details of the tests are to be arranged with the Blue Ridge Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. The evaluation shall be performed, reported and demonstrate compliance within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility. Should conditions prevent concurrent opacity observations, the Blue Ridge Regional Office shall be notified in writing, within seven days, and visible emissions testing shall be rescheduled within 30 days. Rescheduled testing shall be conducted under the same conditions (as possible) as the initial performance tests. One copy of the test result shall be submitted to the Blue Ridge Regional Office within 45 days after test completion and shall conform to the test report format enclosed with this permit. (9 VAC 5-80-490, 40 CFR 60.46b and Conditions 54 and 108 of NSR Permits dated 5/22/2012)

Dominion Generation – Altavista Power Station

Permit Number: BRRO30859 Signature Date: January 15, 2013

Page 18

4. A continuous opacity monitoring system may be used to satisfy the visible emission evaluation requirement in lieu of 40 CFR, Part 60, Appendix A, Method 9. The reported test data shall include averages of all six minute continuous periods within the test period and within the duration of any mass emission performance tests being conducted. It is the responsibility of the permittee to demonstrate that the monitoring system has met the requirements of the applicable performance evaluation, that the monitoring system has been properly maintained and operated, and that the resulting data has not been altered in any way. If monitoring system data indicates compliance for a period during which Method 9 data indicates non-compliance, the Method 9 data shall be used to determine compliance with the visible emission limit. (9 VAC 5-80-490, 40 CFR 60.46b and Conditions 55 and 109 of NSR Permits dated 5/22/2012)

5. See also Condition IX.A.7

E. Reporting-Primary Boilers

- 1. The permittee shall submit fuel oil quality reports to the Blue Ridge Regional Office, within 30 days after the end of each calendar semiannual period. If no shipments of distillate oil were received during the calendar semiannual period, the semiannual report shall consist of the dates included in the calendar semiannual period and a statement that no oil was received during the calendar semiannual period. If distillate oil was received during the calendar semiannual period the reports shall include:
 - a. The dates included in the calendar semiannual period,
 - b. A copy of all fuel supplier certifications for all shipments of distillate oil received during the calendar semiannual period or a semiannual summary from each fuel supplier that includes the information specified in Condition IX.A.9 for each shipment of distillate oil, and,
 - c. A signed statement from the owner or operator of the facility that the fuel supplier certifications or summaries of fuel supplier certifications represent all of the distillate oil burned or received at the facility.

(9 VAC 5-80-490, 9 VAC 5-50-50, 9 VAC 5-50-410, and Conditions 39 and 92 of the NSR Permits dated 5/22/2012)

- 2. The permittee shall furnish written reports to the Blue Ridge Regional Office of excess emissions from the primary boilers monitored by the CO continuous monitoring system on a quarterly basis, postmarked no later than the 30th day following the end of the calendar quarter. These reports shall include, but are not limited to the following information:
 - a. The magnitude of excess emissions, any conversion factors used in the calculation

of excess emissions, and the date and time of commencement and completion of each period of excess emissions;

- b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the process, the nature and cause of the malfunction (if known), the corrective action taken or preventative measures adopted;
- The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments; and
- d. When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired or adjusted, such information shall be stated in that report.

These reports shall be available for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-80-490 and Conditions 45 and 98 of NSR Permits dated 5/22/2012)

- 3. **Compliance Assurance Monitoring (CAM)** The permittee shall submit CAM reports as part of the facility's Title V semi-annual monitoring reports required by General Condition XIII.J of this permit to the Blue Ridge Regional Office. Such reports shall include at a minimum:
 - a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
 - b. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
 - c. A description of the actions taken to implement a quality improvement plan (QIP) during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

(9 VAC 5-80-490 and 40 CFR 64.9(a))

IV. Auxiliary Boiler Requirements - (003)

A. Limitations-Auxiliary Boller

1. Particulate emissions from the auxiliary boiler (003) shall be controlled by combustion efficiency.

(9 VAC 5-80-490 and Conditions 4 and 57 of NSR Permits dated 5/22/2012).

2. Emissions from the operation of the auxiliary boiler shall not exceed the limits specified below. Annual emissions are included in Condition V.A.2.

| | Natural Gas | |
|--------|-------------------------------|---------------|
| | <u>lbs/10⁶ Btu</u> | <u>lbs/hr</u> |
| NOx | 0.073* (30-day roll. avg.) | 10.2* |
| CO | 0.082 | 11.4 |
| VOC | 0.041 | 5.7 |
| | No. 2 Fuel Oil | |
| | <u>lbs/10⁶ Btu</u> | <u>lbs/hr</u> |
| PM | 0.04 | 5.6 |
| PM10 | 0.03 | 4.2 |
| SO_2 | 0.31 (30-day roll. avg.) | 43.2 |
| NOx | 0.2* (30-day roll. avg.) | 27.9* |
| CO | 0.082 | 11.4 |
| VOC | 0.041 | 5.7 |

^{*}Based on high heat release rate.

During any 30-day period when both natural gas and distillate oil are fired, the allowable emission limit for the auxiliary boiler (003) for that period shall be calculated using the equation shown in 40 CFR 60.44b(b), modified as follows:

En =
$$[(ELg \times Hg) +) ELo \times Ho)]$$
 where,
 $(Hg + Ho)$

En = the nitrogen oxides emission limit, expressed as NO2, (lb/MMBtu)

ELg = the individual natural gas emission limit as shown in this condition, (lb/MMBtu)

ELo = the individual distillate oil emission limit as shown in this condition, (lb/MMBtu)

Hg = the natural gas heat input (MMBtu/rolling 30-day period)

Ho = the distillate oil heat input (MMBtu/rolling 30 day period)

(9 VAC 5-80-490, 40CFR60.42b, 40 CFR 60.44b, and Conditions 22 and 75 of NSR Permits dated 5/22/2012)

- 3. The approved fuels for the auxiliary boiler are natural gas and No. 2 Fuel Oil. Distillate oil is defined as fuel oil that meets the specifications for fuel oil numbers 1 or 2 under the American Society for Testing and Materials, ASTM D396 "Standard Specification for Fuel Oils" except as modified by Conditions IV.A.4 and IV.A.5. A change in the fuels may require a permit to modify and operate. (9 VAC 5-80-490 and Conditions 34 and 87 of NSR Permits dated 5/22/2012)
- 4. The maximum sulfur content of the No. 2 Fuel Oil to be burned in the auxiliary boiler shall not exceed 0.3 percent by weight per shipment. Altavista Power Station shall

Dominion Generation - Altavista Power Station

Permit Number: BRRO30859 Signature Date: January 15, 2013

Page 21

maintain records of all fuel oil shipments purchased indicating the sulfur content per shipment. These records shall be available on site for inspection by Department personnel. They shall be kept on file for the most current five-year period. (9 VAC 5-80-490 and Conditions 35 and 88 of NSR Permits dated 5/22/2012)

- 5. The (annual rolling) average sulfur content of the No. 2 Fuel Oil to be burned in the auxiliary boiler shall not exceed 0.2 percent by weight. Altavista Power Station shall maintain records of all fuel oil shipments purchased and the annual average sulfur content determined monthly. These records shall be available on site for inspection by Department personnel. They shall be kept on file for the most current five-year period.
 - (9 VAC 5-80-490 and Conditions 36 and 89 of NSR Permits dated 5/22/2012)
- 6. The auxiliary boiler stack shall be 200 feet or greater. (9 VAC 5-80-490 and Conditions 47 and 100 of NSR Permits dated 5/22/2012)
- Visible emissions from the auxiliary boiler stack (003) shall not exceed ten (10) percent opacity, except during one six minute period per hour which shall not exceed twenty (20) percent opacity.
 (9 VAC 5-80-490, 40 CFR 60.43b, and Conditions 27 and 80 of NSR Permits dated 5/22/2012)

N. Manitorisculardilar Roller

- Continuous emission monitors shall be installed to measure and record the concentration of opacity, SO₂, NOx, and CO₂ or O₂ emitted from the auxiliary boiler (003). They shall be maintained, located and calibrated in accordance with approved procedures (reference to 40 CFR 60.13). A 30 day notification prior to the demonstration of continuous monitoring system performance and subsequent notifications are to be submitted to the Blue Ridge Regional Office. Fuel testing for sulfur content in accordance with NSPS Subpart Db may be substituted for the SO₂ continuous monitor with the approval of the BRRO.
 (9 VAC 5-80-490, 40 CFR 60.47b, 40 CFR 60.48b, 40 CFR 60.13, and Conditions 38 and 91 of NSR Permits dated 5/22/2012)
- 2. The continuous monitoring data generated by the SO₂ monitor (if installed) and NOx monitor on the auxiliary boiler (003) shall be used to determine compliance with the emission standards on a 30-day rolling average basis. All of the data capture, quality assurance provisions, and reporting requirements of NSPS Subpart Db shall apply. The excess emission report as required by NSPS Db for the auxiliary boiler shall include the emission limit for nitrogen oxides for each 30-day period as calculated in accordance with Condition IV.A.2 of this permit. (9 VAC 5-80-110, 40 CFR 60.13, 40 CFR 60 Subpart Db, and Conditions 39 and 98 of NSR Permits dated 5/22/2012)

Dominion Generation - Altavista Power Station

Permit Number: BRRO30859 Signature Date: January 15, 2013

Page 22

3. For all continuous monitors required by this permit, the continuous monitoring and quality assurance data may, at the discretion of the Board, be used as evidence of violation of the emission standards. These monitors are subject to such data capture requirements and/or quality assurance requirements as may be deemed appropriate by the Board (refer to 40 CFR 60.13 and 40 CFR 60, Appendix B). (9 VAC 5-80-490, 40 CFR 60.13, and Conditions 40 and 93 of NSR Permits dated 5/22/2012)

- All continuous emission monitoring systems (CEMS) and continuous opacity monitor (COMS) shall be operated in accordance with the applicable procedures under Performance Specification 1, 2, and 3 of 40 CFR 60, Appendix B.
 (9 VAC 5-80-490 E and 40 CFR 60.13)
- 5. All continuous monitoring systems and monitoring devices, as may be applicable for this source type, shall be installed and operational prior to conducting performance tests under 9 VAC 5-50-30. Performance evaluations of the continuous monitoring system shall take place during the performance tests under 9 VAC 5-50-30 or within 30 days thereafter. The Blue Ridge Regional Office shall be furnished with two copies of the report of the performance evaluations within 60 days of the evaluation. (9 VAC 5-80-490 and Conditions 50 and 104 of NSR Permits dated 5/22/2012)

C. Recordkeeping-Auxiliary Boiler

- 1. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Blue Ridge Regional Office. These records shall include, but are not limited to:
 - a. The daily and annual throughput of distillate oil (in 1000 gallons) used for the auxiliary boiler (003). The annual throughput shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - b. All fuel oil supplier certifications in accordance with Condition IX.A.9
 - c. The annual rolling average sulfur content of the distillate oil burned in the auxiliary boiler (003), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - d. The annual hours of operation for the auxiliary boiler (003) calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most

recently completed calendar month to the individual monthly totals for the preceding 11 months

- e. Verification that the primary boilers and the auxiliary boiler were not operated concurrently in accordance with Condition V.A.1 of this permit.
- f. All reports required by 40 CFR 60 Subpart Db for the auxiliary boiler (003).

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years. (9 VAC 5-80-490, and Conditions 115.1 through q of the NSR Permits dated 5/22/2012)

D. Testing-Auxiliary Boiler See Condition IX.A.7

E. Reporting-Auxiliary Boiler

- 1. The permittee shall submit fuel quality reports to the Blue Ridge Regional Office, within 30 days after the end of each calendar semiannual period. If no shipments of distillate oil were received during the calendar semiannual period, the semiannual report shall consist of the dates included in the calendar semiannual period and a statement that no oil was received during the calendar semiannual period. If distillate oil was received during the calendar semiannual period the reports shall include:
 - a. The dates included in the calendar semiannual period,
 - b. A copy of all fuel supplier certifications for all shipments of distillate oil received during the calendar semiannual period or a semiannual summary from each fuel supplier that includes the information specified in Condition IX.A.9 for each shipment of distillate oil, and
 - c. A signed statement from the owner or operator of the facility that the fuel supplier certifications or summaries of fuel supplier certifications represent all of the distillate oil burned or received at the facility.

(9 VAC 5-80-490, 9 VAC 5-50-50, 9 VAC 5-50-410, and Conditions 39 and 92 of the NSR Permits dated 5/22/2012)

2. The permittee shall submit reports in accordance with 40 CFR 60 Subpart Db for the auxiliary boiler (003). Excess emission and monitoring system performance reports shall be submitted to the Blue Ridge Central Regional Office for every calendar quarterly period in accordance with 40 CFR 60.49b and 40 CFR 60.7. (9 VAC 5-80-490, 9 VAC 5-50-50, 40 CFR 60.7, 40 CFR 60.49b, and Conditions 39 and 92 of the NSR Permits dated 5/22/2012)

V. Combined Boiler Limitations

A. Limitations-Combined Boilers

- 1. The auxiliary boiler (003) and the primary boilers (001, 002) shall not operate concurrently, except during start-up and shutdown, and then for no more than 12 hours over any consecutive 24-hour period, and unless both primary boilers are operating at 50 percent capacity or less.
 - (9 VAC 5-80-490 and Conditions 20 and 73 of NSR Permits dated 5/22/2012)
- 2. Combined emissions from the operation of the primary boilers (001 and 002) and the auxiliary boiler (003) shall not exceed the limitations specified below:

| | tons/yr |
|--------|---------|
| PM | 101.8 |
| PM10 | 71.9 |
| SO_2 | 46.0 |
| NOx* | 417.4 |
| CO** | 918.5 |
| VOC** | 44.2 |

These limitations are a summation of limits for the two primary boilers in accordance with Condition III.A.6 and the auxiliary boiler operating 360 hours per year.

- * Lower limits may be imposed by the DEQ after review of in-stack testing and optimizing the SNCR system at various loads.
- ** Lower limits may be imposed by the DEO, after in-stack testing.

(9 VAC 5-80-490 and Conditions 23 and 76 of NSR Permits dated 5/22/2012)

VI. Diesel Engines Requirements - (005 and 006)

A. Limitations-Diesel Engines

- The two diesel engines (005 and 006) shall not operate more than a combined total of 382 hours per year, calculated as the sum of the most recent 12-month period. (9 VAC 5-80-490 and Conditions 19 and 72 of NSR Permits dated 5/22/2012)
- 2. Emissions from the operation of the diesel engines (005 and 006) shall not exceed the limits specified below:

| Nitrogen Oxides (as NO ₂) | <u>lbs/hr</u> 44.44 | tons/yr 3.19 |
|---------------------------------------|------------------------|-----------------|
| Carbon Monoxide | 9.57 | 0.69 |

Annual limit calculated monthly as the sum of each consecutive 12-month period. (9 VAC 5-80-490 and Conditions 24 and 77 of NSR Permits dated 5/22/2012)

- 3. Visible emissions from the diesel engines (005 and 006) shall not exceed ten (10) percent opacity.
 - (9 VAC 5-80-490 and Conditions 29 and 82 of the NSR Permits dated 5/22/2012)
- 4. The approved fuel for the diesel engines (005 and 006) is diesel fuel (No. 2 Fuel Oil). A change in the diesel engine fuel may require a permit to modify and operate. (9 VAC 5-80-490 and Conditions 33 and 86 of NSR Permits dated 5/22/2012)
- 5. The maximum sulfur content of the No. 2 Fuel Oil to be burned in the diesel engines shall not exceed 0.3 percent by weight per shipment. Altavista Power Station shall maintain records of all fuel oil shipments purchased indicating the sulfur content per shipment. These records shall be available on site for inspection by Department personnel. They shall be kept on file for the most current five-year period. (9 VAC 5-80-490 and Conditions 35 and 88 of NSR Permits dated 5/22/2012)
- 6. The (annual rolling) average sulfur content of the No. 2 Fuel Oil to be burned in the diesel engines shall not exceed 0.2 percent by weight. Altavista Power Station shall maintain records of all fuel oil shipments purchased and the annual average sulfur content determined monthly. These records shall be available on site for inspection by Department personnel. They shall be kept on file for the most current five-year period.
 - (9 VAC 5-80-490 and Conditions 36 and 89 of NSR Permits dated 5/22/2012)
- 7. The emergency diesel feedwater pump (005) and diesel firewater pump engine (600) shall comply with all applicable requirements of 40 CFR 63 Subpart ZZZZ for compression ignition reciprocating internal combustion engines (CI RICE) by the compliance date of 5/3/13.
 - (9 VAC 5-60-95, 9 VAC 5-60-100, 9 VAC 5-80-110 and 40 CFR 63 Subpart ZZZZ)

B. Recordkeeping-Diesel Engines

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Blue Ridge Regional Office. These records shall include, but are not limited to:

- 1. Annual hours of operation of the diesel engines (005 and 006), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
- 2. The maximum sulfur content per shipment of distillate oil burned in the diesel engines (005 and 006).

3. The annual rolling average sulfur content of the distillate oil burned in the diesel engines (005 and 006), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-80-490 and Conditions 115.r through t of NSR Permits dated 5/22/2012)

C. Testing-Diesel Engines

See Condition IX.A.7

D. Reporting-Diesel Engines

Upon request of the Department, the permittee shall provide reports in a manner and form using procedures acceptable to the Department. (9 VAC 5-80-490)

VII. Biomass, Ash & Lime Handling Requirements - (010 through 017, 020 through 023, 025, and 101 through 104-11)

A. Limitations-Biomass, Ash & Lime Handling

- 1. Particulate emissions from the wood storage silo, the emergency truck loading station, lime storage silo, recycle bin and discharge storage silo shall be controlled by fabric filters. The fabric filters shall be provided with adequate access for inspection. (9 VAC 5-80-490 and Conditions 5 and 58 of NSR Permits dated 5/22/2012)
- 2. Particulate emissions from the biomass hog shall be controlled by total enclosure. (9 VAC 5-80-490 and Conditions 6 and 59 of NSR Permits dated 5/22/2012)
- 3. The wood pulverizer systems shall include fabric filters for the collection of pulverized wood fuel. The fabric filters shall be provided with adequate access for inspection.
 - (9 VAC 5-80-490 and Conditions 9 and 62 of NSR Permits dated 5/22/2012)
- 4. Lime slaker emissions shall be controlled by fabric filter. The fabric filter shall be provided with adequate access for inspection and shall have a device for continuous measurement of pressure drop.
 - (9 VAC 5-80-490 and Conditions 10 and 63 of NSR Permits dated 5/22/2012)
- 5. The wood pulverizer shall be enclosed to prevent fugitive dust emissions. A fabric filter or other dust control methods, as approved by the Blue Ridge Regional Office, may be required after visible inspection by Agency personnel.

 (9 VAC 5-80-490 and Conditions 11 and 64 of NSR Permits dated 5/22/2012)

- All conveyor belt returns shall be equipped with a belt scraper system. Scrapings shall be returned in an enclosed manner to the main flow of material.
 (9 VAC 5-80-490 and Conditions 12 and 65 of NSR Permits dated 5/22/2012)
- Fugitive dust emissions from the ash and flue gas desulfurization product storage silo shall be controlled by mixing the discharge with water.
 (9 VAC 5-80-490 and Conditions 13 and 66 of NSR Permits dated 5/22/2012)
- 8. Fugitive dust emissions from the furnace bottom ash handling system shall be controlled by quenching ash with water. Fugitive dust emissions from the boiler generator bank conveyor and the mechanical collector hopper conveyor shall be saturated by water spray nozzles.

 (9 VAC 5-80-490 and Conditions 14 and 67 of NSR Permits dated 5/22/2012)
 - (9 VAC 3-80-490 and Conditions 14 and 07 of NSK Fernins dated 3/22/2012)
- 9. The yearly throughput of the biomass handling system shall not exceed 785,480 tons per year.
 - (9 VAC 5-80-490 and Conditions 16 and 69 of NSR Permits dated 5/22/2012)
- Fugitive particulate emissions from the unloading, transfer and handling of biomass shall be minimized by utilizing methods approved by DEQ. (9 VAC 5-80-440 and 9 VAC 5-80-490)
- 11. Particulate emissions from the operation of the wood dust, ash and lime storage and handling systems shall not exceed the limits specified below:

| PM | 6.5 | tons/yr |
|-------|-----|---------|
| PM10 | 6.5 | tons/yr |
| PM2.5 | 6.5 | tons/yr |

These emissions are derived from the estimated overall emissions contribution and are included for emission inventory purposes. Compliance shall be determined as stated in Conditions VII.A.1, VII.A.3 through VII.A.8, IX.A.1 through IX.A.3, and XIII.Y.

(9 VAC 5-80-490 and Conditions 25 and 78 of NSR Permits dated 5/22/2012)

12. Particulate emissions from the operation of the biomass handling system and storage pile shall not exceed the limits specified below:

| PM | 1.57 | tons/yr |
|-------|------|---------|
| PM10 | 0.60 | tons/yr |
| PM2.5 | 0.10 | tons/yr |

These emissions are derived from the estimated overall emissions contribution and are included for emission inventory purposes. Compliance shall be determined as stated in Conditions XIII.Y, VII.A.13, and VII.A.9.

(9 VAC 5-80-490 and Conditions 26 and 79 of NSR Permits dated 5/22/2012)

- 13. Visible emissions from biomass handling system shall not exceed 10 percent opacity as determined using the methods specified in 9 VAC 5-50-20 A.3.
 - (9 VAC 5-80-490 and Conditions 28 and 81 of NSR Permits dated 5/22/2012)
- 14. Visible emissions from all fabric filters associated with the lime, ash, biomass handling shall not exceed five (5) percent opacity.(9 VAC 5-80-490 and Conditions 30 and 83 of NSR Permits dated 5/22/2012)

B. Monitoring-Biomass, Ash & Lime Handling

- 1. Visible emission observations from the fabric filter exhaust stacks and all fugitive emission points shall be conducted at least once a week. If visible emissions are observed, the permittee shall:
 - a. Take timely corrective action such that the equipment resumes operation with no visible emissions or,
 - b. Perform a visible emission evaluation (VEE) in accordance with 40 CFR 60, Appendix A, Method 9 to assure visible emissions from any fabric filter is less than five (5) percent opacity or any fugitive emission point is less than ten (10) percent opacity. The VEE shall be conducted for a minimum of six (6) minutes. If any of the 15-second observations exceeds the appropriate opacity value listed in Conditions VII.A.13 or VII.A.14, the VEE shall be conducted for a total of sixty (60) minutes. If compliance is not demonstrated by the VEE, timely corrective action shall be taken such that the equipment resumes operation with visible emissions of less than the allowable limits listed in Conditions VII.A.13 or VII.A.14.

A record of the date, time, observer, cause and corrective measures taken shall be made. If no visible emissions were observed, a record of the date, time and observer

shall be made. These records shall be maintained on site by the permittee for the most recent 5-year period. (9 VAC 5-80-490 E)

C. Recordkeeping-Biomass, Ash & Lime Handling

- 1. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Blue Ridge Regional Office. These records shall include, but are not limited to:
 - a. The results of the weekly opacity observations of all emissions points associated with these processes (010 through 017, 020 through 023, 025, and 101 through 104-11), along with any corrective actions.
 - b. The annual throughput of the biomass handling system (in tons). The annual throughput shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

 (9 VAC 5-80-490 and Condition 115.u of NSR Permits dated 5/22/2012)

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years. (9 VAC 5-80-490 and 9 VAC 5-50-50)

D. Testing-Biomass, Ash & Lime Handling

See Condition IX.A.7

E. Reporting-Biomass, Ash & Lime Handling

Upon request of the Department, the permittee shall provide reports in a manner and form using procedures acceptable to the Department (9 VAC 5-80-490)

VIII. Distillate Fuel Oil Storage Tank Requirements - (024)

The permittee shall keep readily accessible records showing tank dimensions and an analysis showing the capacity of the distillate oil storage tank (024) and shall report to the Blue Ridge Regional Office if the maximum true vapor pressure of the stored product exceeds 0.50 psi. (9 VAC 5-80-490, 40 CFR 60.116b, 9 VAC 5-50-50 and Condition 115.v of NSR Permits dated 5/22/2012)

IX. Facility Wide Conditions

A. Requirements-Facility Wide

1. Fugitive emissions from all facility access roads shall be controlled by paving. Fugitive emissions from paved roads shall be controlled by wetting, sweeping, or other dust control methods, as approved by the Blue Ridge Regional Office.

(9 VAC 5-80-490 and Conditions 15 and 68 of NSR Permits dated 5/22/2012)

- 2. Visible emissions from the fugitive emission points shall not exceed ten (10) percent opacity.
 - (9 VAC 5-80-490 and Conditions 29 and 82 of NSR Permits dated 5/22/2012)
- 3. Visible emissions from all fabric filters (except those on the primary boilers) shall not exceed five percent opacity.
 - (9 VAC 5-80-490 and Conditions 30 and 83 of NSR Permits dated 5/22/2012)
- 4. Any host steam agreement, excluding financial terms, shall be made available on site for review by the DEQ upon request.
 - (9 VAC 5-80-490 and Conditions 46 and 99 of NSR Permits dated 5/22/2012)
- 5. No project shall result in a major modification as defined in 9 VAC 5-80-1615 without receiving a permit pursuant to 9 VAC 5-80 Article 8. For projects which rely on excluded emissions (subsection c of the definition of "projected actual emissions" in 9 VAC 5-80-1615) to be exempt from review under 9 VAC 5-80 Article 8, the following conditions shall apply:
 - a. The permittee shall maintain records sufficient to demonstrate the project did not result in a major modification as defined in 9 VAC 5-80-1615. Any increase in emissions without sufficient documentation shall be attributed to the project.
 - b. If annual emissions after the project (12 month rolling total) exceed the "baseline actual emissions" (as defined in 9 VAC 5-80-1615) for the project by a "significant" amount (as defined in 9 VAC 5-80-1615), the permittee shall notify the Blue Ridge Regional Office within fifteen (15) days after the event.

For each applicable project, Conditions IX.A.5.a and IX.A.5.b are effective for the projection period as prescribed in the definition of "projected actual emissions" located in 9 VAC 5-80-1615. Nothing in this condition shall restrict when the Board may find the permittee in violation of 9 VAC 5-80-1625 A.

- (9 VAC 5-80-490 and Condition 103 of NSR Permit dated 5/22/2012)
- 6. Where there is a reasonable possibility a project may result in a significant emissions increase and the permittee elects to use the method specified in subdivisions a through c of the definition of "projected actual emissions" in 9 VAC 5-80-1615 for calculating projected actual emissions, the permittee shall comply with 9 VAC 5-80-1785 B, C and E.
 - (9 VAC 5-80-490 and 9 VAC 5-80-1785)
- 7. The electricity generating facility shall be modified so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. This includes constructing the facility/equipment such that volumetric flow rates and pollutant

Dominion Generation - Altavista Power Station

Permit Number: BRRO30859 Signature Date: January 15, 2013

Page 31

emission rates can be accurately determined by applicable test methods and providing a stack or duct that is free from cyclonic flow. Sampling ports shall be provided when requested at the appropriate locations and safe sampling platforms and access shall be provided.

(9 VAC 5-80-490 and Condition 113 of NSR Permit dated 5/22/2012)

- 8. The permittee shall furnish written notification to the Blue Ridge Regional Office of:
 - a. The actual date on which start up of the biomass handling system occurred within 30 days of such date.
 - b. The actual start-up date of the modified electricity generating facility within 15 days after such date.
 (40 CFR 60.49b)
 - c. The anticipated date of performance tests postmarked at least 30 days prior to such date.
 - d. The anticipated date of continuous monitoring system performance evaluations postmarked not less than 30 days prior to such date.
 - e. The intention to use continuous opacity monitoring system data results to demonstrate compliance with the applicable visible emission limit during a performance test in lieu of Reference Method 9 (reference 40 CFR Part 60, Appendix A), postmarked not less than 30 days prior to the date of the performance test.

Copies of the written notification referenced in items b, c and e above are to be sent to:

Associate Director
Office of Air Enforcement and Compliance Assistance (3AP20)
U.S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

(9 VAC 5-80-490 and Condition 114 of NSR Permit dated 5/22/2012)

- 9. The permittee shall obtain a certification from the fuel supplier with each shipment of distillate oil. Each fuel supplier certification shall include the following:
 - a. The name of the fuel supplier
 - b. The date on which the distillate oil was received

- c. The volume of distillate delivered in the shipment
- d. A statement that the distillate oil complies with the American Society for Testing and Materials specifications for fuel oil numbers 1 and 2, and
- e. The sulfur content of the distillate oil
- (9 VAC 5-80-490 and Condition 116 of NSR Permit dated 5/22/2012)
- 10. Maintenance/Operating Procedures—The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment and process equipment which affect such emissions:
 - a. Develop a maintenance schedule and maintain records of all scheduled and nonscheduled maintenance
 - b. Maintain an inventory of spare parts.
 - c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.
 - d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures, prior to their first operation of such equipment. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request. (9 VAC 5-80-490 and Condition 120 of NSR Permit dated 5/22/2012)

X. Insignificant Emission Units

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Signature Date: January 15, 2013 Page 33

| Emission Unit No. | Emission Unit Description | Citation | Pollutant(s) Emitted (9 VAC 5-80- 720B) | Rated Capacity (9 VAC 5-80-720 C) |
|----------------------|---|--------------------|---|--------------------------------------|
| | Turbine Lube Oil Reservoir | 9 VAC 5-80-720-B.2 | VOC | |
| | Solvent-based parts washer (non- halogenated) | 9 VAC 5-80-720-B.2 | VOC | |
| | Used oil tank | 9 VAC 5-80-720-C.3 | | 200 gallons |
| | Oil/Water Separator (sump) | 9 VAC 5-80-720-C.3 | | 280 gallons |

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-490.

XI. Permit Shield & Inapplicable Requirements

Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

| Citation | Title of Citation | Description of Non Applicability | | |
|---------------------|-----------------------------------|--|--|--|
| 40CFR60 Subpart Y | Standards of Performance for Coal | Facility is being converted to biomass | | |
| • | Preparation and Processing Plants | fired station; no coal on site | | |
| 40CFR60 Subpart OOO | Standards of Performance for | No crushing occurs in the limestone | | |
| 40CFR00 Subpart 000 | Nonmetallic Mineral Processing | process | | |

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by the (i) administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.

(9 VAC 5-80-490 and 9 VAC 5-80-500)

XII. Title IV Requirements

The attached Phase II Acid Rain Permit Application is incorporated into this permit by reference (Attachment A). The owners and operators of the source shall comply with the standard requirements and special provisions set forth in the application. (9 VAC 5-80-440 and 9 VAC 5-80-490 A.4.a and c, B, C, E, F, M, O and P)

Page 34

A. Statutory and Regulatory Authorities

Statutory and Regulatory Authorities: In accordance with the Air Pollution Control Law of Virginia §10.1-1308 and §10.1-1322, the Environmental Protection Agency (EPA) Final Full Approval of the Operating Permits Program (Titles IV and V) published in the Federal Register December 4, 2001, Volume 66, Number 233, Rules and Regulations, Pages 62961-62967 and effective November 30, 2001, and Title 40, Code of Federal Regulations §§72.1 through 76.16, the Commonwealth of Virginia Department of Environmental Quality issues this permit pursuant to the Virginia Regulations for the Control and Abatement of Air Pollution (9 VAC 5 Chapter 80, Article 3 - Acid Rain Operating Permits).

B. SO₂ Allowance Allocations and NOx Requirements for affected units

| | | 2009 | 2010 | 2011 | 2012 | 2013 | |
|--------|---|-----------------------------|-------------------|---------------------------|-------------------|-------------------|--|
| Unit 1 | SO ₂ allowances, allocated by U.S. EPA (tons) | None ¹ | None ¹ | None ¹ | None | None ¹ | |
| | NO _x limit | Not applicable ² | | | | | |
| | | 2009 | 2010 | 2011 | 2012 | 2013 | |
| Unit 2 | SO ₂ allowances, allocated by U.S. EPA (tons) | None | None ¹ | None ^t | None ¹ | None ¹ | |
| | NO _x limit | | No | t applicable ² | | | |

See Condition XII.C.2

C. Additional Requirements, Comments, Notes, and Justifications

- Dominion Generation shall submit a complete permit application that includes all of the information required under 40 CFR §\$72.21 and 72.31 at least 6 months, but no earlier than 18 months, prior to the date of expiration of the existing Title IV, Phase II, Acid Rain permit. EPA forms shall be used. (9 VAC 5-80-430 C.5)
- 2. These units (Units 1 and 2) were not eligible for SO₂ allowance allocations by U.S. EPA under Section 405 of the Clean Air Act and the Acid Rain Program. SO₂ allowances may be acquired from other sources in addition to those allocated by U.S. EPA. No revision to this permit is necessary in order for the owners and operators of these units to hold additional allowances recorded in accordance with 40 CFR Part

See Condition XII.C.3

Page 35

73. The owners and operators of these units remain obligated to hold sufficient allowances to account for SO_2 emissions from this unit in accordance with 40 CFR 72.9(c)(1).

(9 VAC 5-80-420 C.1 and H.1 and 9 VAC 5-80-490 O)

Units 1 and 2 are spreader stoker boilers and are therefore not subject to NOx limitations under 40 CFR Part 76.
 (9 VAC 5-80-490 and 40 CFR Part 76)

XIII. General Conditions

A. Federal Enforceability

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.

(9 VAC 5-80-490 N)

B. Permit Expiration

This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9 VAC 5-80-430, the right of the facility to operate shall be terminated upon permit expiration. (9 VAC 5-80-430 B, C and F, 9 VAC 5-80-490 D, and 9 VAC 5-80-530 B)

C. Permit Expiration

The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.

(9 VAC 5-80-430 B, C and F, 9 VAC 5-80-490 D, and 9 VAC 5-80-530 B)

D. Permit Expiration

If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 3, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-510.

(9 VAC 5-80-430 B, C and F, 9 VAC 5-80-490 D, and 9 VAC 5-80-530 B)

E. Permit Expiration

No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-430 for a renewal permit, except in compliance with a permit issued under Article 3, Part II of 9 VAC 5 Chapter 80. (9 VAC 5-80-430 B, C and F, 9 VAC 5-80-490 D, and 9 VAC 5-80-530 B)

F. Permit Expiration

If an applicant submits a timely and complete application under section 9 VAC 5-80-430 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the

renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-500, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.

(9 VAC 5-80-430 B, C and F, 9 VAC 5-80-490 D, and 9 VAC 5-80-530 B)

G. Permit Expiration

The protection under subsections F.1 and F.5(ii) of section 9 VAC 5-80-430 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-430 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application. (9 VAC 5-80-430 B, C and F, 9 VAC 5-80-490 D, and 9 VAC 5-80-530 B)

H. Recordkeeping and Reporting

All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:

- a. The date, place as defined in the permit, and time of sampling or measurements.
- b. The date(s) analyses were performed.
- c. The company or entity that performed the analyses.
- d. The analytical techniques or methods used.
- e. The results of such analyses.
- f. The operating conditions existing at the time of sampling or measurement. (9 VAC 5-80-490 F)

I. Recordkeeping and Reporting

Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

(9 VAC 5-80-490 F)

J. Recordkeeping and Reporting

The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than <u>March 1</u> and <u>September 1</u> of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-430 G and shall include:

a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.

Dominion Generation - Altavista Power Station

Permit Number: BRRO30859 Signature Date: January 15, 2013

Page 37

- b. All deviations from permit requirements. For purposes of this permit, deviations include, but are not limited to:
 - (i) Exceedance of emissions limitations or operational restrictions,
 - (ii) Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or Compliance Assurance Monitoring (CAM) which indicates an exceedance of emission limitations or operational restrictions; or,
 - (iii)Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.
- c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period."
- (9 VAC 5-80-490 F)

K. Annual Compliance Certification

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than March 1 each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices ending December 31. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and § 504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-430 G, and shall include:

- 1. The time period included in the certification. The time period to be addressed is January 1 to December 31.
- 2. The identification of each term or condition of the permit that is the basis of the certification.
- 3. The compliance status.
- 4. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.
- 5. Consistent with subsection 9 VAC 5-80-490 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.
- 6. Such other facts as the permit may require to determine the compliance status of the source.
- 7. One copy of the annual compliance certification shall be sent to EPA in electronic

Permit Number: BRRO30859 Signature Date: January 15, 2013

Page 38

format only. The certification document should be sent to the following electronic mailing address:

R3 APD Permits@epa.gov

(9 VAC 5-80-490 K.5)

L. Permit Deviation Reporting

The permittee shall notify the Blue Ridge Regional Office within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. Owners subject to the requirements of 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-50-40. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to Condition XIII. J of this permit. (9 VAC 5-80-490 F.2 and 9 VAC 5-80-650)

M. Failure/Malfunction Reporting

In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the Blue Ridge Regional Office by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within 14 days of the discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities and pollutants subject to the monitoring requirements of 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Blue Ridge Regional Office. (9 VAC 5-20-180 C)

N. Failure/Malfunction Reporting

The emission units that have continuous monitors subject to 9 VAC 5-50-50 C are not subject to the 14 day written notification.

(9 VAC 5-20-180 C, and 9 VAC 5-50-50)

O. Failure/Malfunction Reporting

The emission units subject to the reporting and the procedure requirements of 9 VAC 5-50-50 C are listed below:

- a. Main Boiler (001)
- b. Main Boiler (002)
- c. Auxiliary Boiler (003).

(9 VAC 5-20-180 C, and 9 VAC 5-50-50)

P. Failure/Malfunction Reporting

Each owner required to install a continuous monitoring system (CMS) or monitoring device subject to 9 VAC 5-50-410 shall submit a written report of excess emissions (as defined in the applicable subpart in 9 VAC 5-50-410) and either a monitoring systems performance report or a summary report form, or both, to the board quarterly. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter and shall include the following information:

- a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factors used, and the date and time of commencement and completion of each period of excess emissions;
- b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the source. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted;
- c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments; and
- d. When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired or adjusted, such information shall be stated in the report.

All malfunctions of emission units not subject to 9 VAC 5-50-50 C require written reports within 14 days of the discovery of the malfunction.

(9 VAC 5-20-180 C, and 9 VAC 5-50-50)

Q. Severability

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.

(9 VAC 5-80-490 G.1)

Page 40

R. Duty to Comply

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is ground for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

(9 VAC 5-80-490 G.2)

S. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(9 VAC 5-80-490 G.3)

T. Permit Modification

A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1605, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios. (9 VAC 5-80-550 and 9 VAC 5-80-660)

U. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. (9 VAC 5-80-490 G.5)

V. Duty to Submit Information

The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality. (9 VAC 5-80-490 G.6)

W. Duty to Submit Information

Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-430 G.

(9 VAC 5-80-490 K.1)

X. Duty to Pay Permit Fees

The owner of any source for which a permit under 9 VAC 5-80-360 through 9 VAC 5-80-700 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350. The actual emissions covered by the permit program fees

for the preceding year shall be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department.

(9 VAC 5-80-490 H and 9 VAC 5-80-340 C)

Y. Fugitive Dust Emission Standards

Fugitive dust and fugitive emission controls shall include the following, or equivalent, as approved by DEQ:

- 1. Use of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land.
- 2. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition.
- 3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials. Adequate containment methods shall be employed during sandblasting or other similar operations.
- 4. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion.
- 5. Prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.
- 6. Dust from material handling, and load-outs, shall be controlled by wet suppression or equivalent. The wet suppression spray systems shall be operated at optimum design.
- 7. Reasonable precautions shall be taken to prevent deposition of dirt on public roads and subsequent dust emissions. Dirt, product, or raw material spilled or tracked onto paved surfaces shall be promptly removed to prevent particulate matter from becoming airborne.
 - (9 VAC 5-80-490 and Condition 112 of NSR Permit dated 5/22/2012)

Z. Startup, Shutdown, and Malfunction

At all times, including periods of startup, shutdown, soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(9 VAC 5-50-20 E and 40 CFR 60.11(d))

Page 42

AA. Alternative Operating Scenarios

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-500 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80 Article 3. (9 VAC 5-80-490 J)

BB. Inspection and Entry Requirements

The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

- 1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
- 2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
- 3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
- 4. Sample or monitor at reasonable times, substances, or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-490 K.2)

CC. Reopening For Cause

The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-430 F. The conditions for reopening a permit are as follows:

- 1. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
- 2. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

Page 43

3. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-490 D.

(9 VAC 5-80-490 L)

DD. Permit Availability

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.

(9 VAC 5-80-490 and 9 VAC 5-80-510 E)

EE. Transfer of Permits

No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another. (9 VAC 5-80-490 and 9 VAC 5-80-520)

FF. Transfer of Permits

In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-560.

(9 VAC 5-80-490 and 9 VAC 5-80-520)

GG. Transfer of Permits

In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-560.

(9 VAC 5-80-490 and 9 VAC 5-80-520)

HH. Malfunction as an Affirmative Defense

A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of paragraph XIII.II of this condition are met.

(9 VAC 5-80-490 and 9 VAC 5-80-650)

II. Malfunction as an Affirmative Defense

The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:

a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.

- b. The permitted facility was at the time being properly operated.
- c. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.
- d. The permittee notified the board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9 VAC 5-80-490 F.2.b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.

(9 VAC 5-80-490 and 9 VAC 5-80-650)

JJ. Malfunction as an Affirmative Defense

In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof. (9 VAC 5-80-490 and 9 VAC 5-80-650)

KK. Malfunction as an Affirmative Defense

The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.

(9 VAC 5-80-490 and 9 VAC 5-80-650)

LL. Permit Revocation or Termination for Cause

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 3. The Board may suspend, under such conditions and for such period of time as the Board may prescribe, any permit for any of the grounds for revocation or termination or for any other violations of these regulations. (9 VAC 5-80-550 and 9 VAC 5-80-660)

MM. Duty to Supplement or Correct Application

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application

Permit Number: BRRO30859 Signature Date: January 15, 2013 Page 45

was filed but prior to release of a draft permit. (9 VAC 5-80-490 and 9 VAC 5-80-430 E)

NN. Stratospheric Ozone Protection

If the permittee handles or emits one or more Class I or II substance subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.

(9 VAC 5-80-490 and 40 CFR Part 82, Subparts A - F)

OO. Changes to Permits for Emissions Trading

No permit revision shall be required, under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.

(9 VAC 5-80-490 I)

PP. Emissions Trading

Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

- 1. All terms and conditions required under 9 VAC 5-80-490 except subsection N, shall be included to determine compliance.
- 2. The permit shield described in 9 VAC 5-80-500 shall extend to all terms and conditions that allow such increases and decreases in emissions.
- 3. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-360 through 9 VAC 5-80-700.

(9 VAC 5-80-490 I)

QQ. Violation of Ambient Air Quality Standard

The permittee shall, upon request of the DEQ, reduce the level of operation or shut down a facility, as necessary to avoid violating any primary ambient air quality standard and shall not return to normal operation until such time as the ambient air quality standard will not be violated.

(9 VAC 5-80-490 and Condition 123 of NSR Permit dated 5/22/2012)

Dominion Generation - Altavista Power Station

Permit Number: BRRO30859 Signature Date: January 15, 2013

Page 46

XIV. Clean Air Interstate Rule (CAIR) Requirements

The permittee shall comply with all applicable CAIR requirements (9 VAC 5-140-1010 et seq., 9 VAC 5-140-2010 et seq., 9 VAC 5-140-3010 et seq., and 40 CFR Part 96) by the compliance date in the respective Part of 9 VAC 5 Chapter 140, as contained in the CAIR Permit. The CAIR Permit is Attachment B to this document and expires upon expiration of this Title V permit

(9 VAC 5-80-490, 40 CFR Part 96, and 9 VAC 5 Chapter 140)

Attachment A
Phase II Acid Rain Application

Pamela F. Faggert Vice President and Chief Environmental Officer

Dominion Resources Services, Inc. 5000 Dominion Boulevard, Glen Allen, Virginia 23060

Phone: 804-273-3467



Certified Mail - Return Receipt Requested

January 31, 2008

Mr. David J. Brown Air Permit Manager Southern Central Regional Office Virginia Department of Environmental Quality 7705 Timberlake Road Lynchburg, VA 24502 RECEIVED

FEB 0 8 2008 DEQ SCRO

Re:

Dominion – Altavista Power Station Phase II Acid Rain Permit Renewal DEQ Air Registration No. 30859

Dear Mr. Brown:

A Phase II Acid Rain Permit Application, required to renew the existing permit for Altavista Power Station, is enclosed. A copy of the Certificate of Representation report from the CAMD website has also been included for your reference. The existing permit expires December 31, 2008.

If you have any questions, please feel free to contact Liz Willoughby at (804) 273-3740 or Elizabeth.A. Willoughby@dom.com.

Sincerely,

Pamela Faggert

Attachment: Altavista Power Station Acid Rain Pennit Renewal Forms

cc:

U.S. Environmental Protection Agency Clean Air Markets Division

1200 Pennsylvania Avenue, NW

Mail Code 6204J

Washington, DC 20460



Acid Rain Permit Application

| | For more information, | see instructions and refer to | 40 CFR 72.30 and 72.31 | • |
|--|--|---|---|--|
| • | This submission is: | New X Revised | • | |
| STEP 1 | | | | |
| Identify the source by plant name, State, and ORIS code | Altavista Power | Station | VA State OF | 10773 RIS Code |
| | | | • | |
| STEP 2 | а | . b | , c | d |
| Enter the unit ID# for every affected unit at the affected source in column "a." | Unit ID# | Unit Will Hold Allowances in Accordance with 40 CFR 72.9(c)(1) | New Units Commence Operation Date | New Units Monitor Certification Deadline |
| Identify the source by plant name, State, and ORIS code. STEP 2 Enter the unit ID# for every affected unit at the affected | 1 | Yes | | |
| columns c and d. | 2 | , Yes | | |
| | | Yes | | |
| | | Yes | | |
| | | Yes | | - |
| • | | Yes | | |
| , | | Yes | | |
| · | | Yes | | |
| | | Yes | | |
| · | | Yes | | |
| | | Yes | | |
| | | Yes | · | |
| EFR 0 8 2008 | Altavista Power Station Plant Name Altavista Power Station VA State ORI New Units Commence Operation Date Altavista Power Station VA State ORI New Units Commence Operation Date Yes Yes Yes Yes Yes Yes Yes Y | | | |
| ary scro | | Yes | | |
| Mark Water Alfai | | Yes | | |
| | | Yes | , | |
| | | , Van | | |

Yes

| | | Altavista | Power | Station |
|------------------------|----|-----------|-------|---------|
| Plant Name (from Sten. | 1١ | | | • |

Permit Requirements

source shall:

STEP 3

Read the standard requirements

- (1) The designated representative of each affected source and each affected unit at the
 - (i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and
 - (ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;
- (2) The owners and operators of each affected source and each affected unit at the source shall:
 - (i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and
 - (ii) Have an Acid Rain Permit.

Monitoring Requirements

- (1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements

- (1) The owners and operators of each source and each affected unit at the source shall:
- (i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)), or in the compliance subaccount of another affected unit at the same source to the extent provided in 40 CFR 73.35(b)(3), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and
- (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
 - (i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
 - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).
- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

| 1 | | | |
|--------------------------|-----------|-------|---------|
| | Altavista | Power | Station |
| Plant Name (from Step 1) | • | | |

STEP 3, Cont'd. <u>Nitrogen Oxides Requirements</u> The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Excess Emissions Requirements

- (1) The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
- (2) The owners and operators of an affected unit that has excess emissions in any calendar year shall:
 - (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
 - (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Recordkeeping and Reporting Requirements

- (1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
 - (i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
 - (ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
 - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
 - (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.

| lant Name (from Sten | 1) | Altavista | Power | Statio |
|----------------------|----|-----------|-------|--------|
| | | | | |

Step 3, Cont'd.

Liability, Cont'd.

(5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source. (6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NO_x averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one affected unit shall not be liable for any violation by any other affected unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.

(7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative

of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:

(1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;

(2) Limiting the number of allowances a unit can hold; provided, that the number of allowances held by the unit shall not affect the source's obligation to comply with any

other provisions of the Act;

(3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;

(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy

Regulatory Commission under the Federal Power Act; or,

(5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

STEP 4

Certification

Read the certification statement, sign, and date

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

FEB 0 8 2008

UEU SCRU

RECEIVED

| Name | C.D. Holley | | |
|---------|-------------|-------------|--|
| Signatu | e MApeleen | Date 2/1/05 | |

EPA Form 7610-16 (rev. 12-03)



Acid Rain Program Instructions for Acid Rain

Permit Application (40 CFR 72.30-72.31)

The Acid Rain Program requires the designated representative to submit an Acid Rain permit application for each source with an affected unit. A complete Certificate of Representation must be received by EPA <u>before</u> the permit application is submitted to the title V permitting authority. A complete Acid Rain permit application, once submitted, is binding on the owners and operators of the affected source and is enforceable in the absence of a permit until the title V permitting authority either issues a permit to the source or disapproves the application.

Please type or print. The alternate designated representative may sign in lieu of the designated representative. If assistance is needed, contact the title V permitting authority.

- STEP 1 Use the plant name and ORIS Code listed on the Certificate of Representation for the plant. An ORIS code is a 4 digit number assigned by the Energy Information Agency (EIA) at the U.S. Department of Energy to power plants owned by utilities. If the plant is not owned by a utility but has a 5 digit facility code (also assigned by EIA), use the facility code. If no code has been assigned or if there is uncertainty regarding what the code number is, contact EIA at (202) 287-1730 (for ORIS codes), or (202) 287-1927 (for facility codes).
- STEP 2 For column "a," identify each affected unit at the affected source by providing the appropriate unit identification numbers, consistent with the unit identification numbers entered on the Certificate of Representation and with unit identification numbers used in reporting to DOE and/or EIA. For new units without identification numbers, owners and operators may assign such numbers consistent with EIA and DOE requirements.

For columns "c" and "d," enter the commence operation date(s) and monitor certification deadline(s) for new units in accordance with 40 CFR 72.2 and 75.4, respectively.

Submission Deadlines

For new units, an initial Acid Rain permit application must be submitted to the title V permitting authority 24 months before the date the unit commences operation. Acid Rain permit renewal applications must be submitted at least 6 months in advance of the expiration of the acid rain portion of a title V permit, or such longer time as provided for under the title V permitting authority's operating permits regulation.

Submission Instructions

Submit this form to the appropriate title V permitting authority. If you have questions regarding this form, contact your local, State, or EPA Regional Acid Rain contact, or call EPA's Acid Rain Hotline at (202) 343-9620.

Paperwork Burden Estimate

The burden on the public for collecting and reporting information under this request is estimated at 17 hours per response. Send comments regarding this collection of information, including suggestions for reducing the burden, to: Chief, Information Policy Branch (PM-223), U.S. Environmental Protection Agency, 1200 Pennsylvania Ave. NW, Washington, D.C. 20460; and to: Paperwork Reduction Project (OMB#2060-0258), Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503. *Do not submit forms to these addresses; see the submission instructions above.*



Reports and Queries

Certificate of Representation 12/28/2007

Facility Information

Facility ID (ORISPL): 1073

Facility Altavista Power

Name: Station

State: VA

Tribal Land:

County: Campbell

EPA AIRS 5103100156

Latitude: 37.1189

Longitude: 70

Facility Detail (Mini Detail)

Representative Information

Name: Donald C Craft

Company: Virginia Electric & Power Company

Title: Station Director

Address: VA 23060

Phone: (804) 273-5062

Fax: (804) 273-2433

Alternate:

Email: donnie.craft@dom.com

Name: Charles D Holley

Company: Dominion Resources Services, Inc.

Title: VP, Fossil & Hydro, System Ops

Address: VA 23060

Phone: (804) 273-3592

Fax: (804) 273-2433

Alternate:

Email: doug.holley@dom.com

People Detail Layout (Multiple)

Current Representatives

| Program | Primary Representative, Effective Date | Alternate Representative, Effective Date | Primary Representative, End Date | Alternate Representative, End Date |
|---------|---|---|-------------------------------------|---------------------------------------|
| ARP | Charles D Holley, 12/26/2007 | Donald C Craft, 06/16/2006 | | : |
| CAIRNOX | Charles D Holley, 12/26/2007 | Donald C Craft, 05/31/2007 | | · |
| CAIROS | Charles D Holley, 12/26/2007 | Donald C Craft, 05/31/2007 | | |
| CAIRSO2 | Charles D Holley, 12/26/2007 | Donald C Craft, 05/31/2007 | | |
| CAMR | Charles D Holley, 12/26/2007 | Donald C Craft, 08/16/2007 | | |
| NBP | Charles D Holley, 12/26/2007 | Donald C Craft, 06/16/2006 | | |

Basic Table Layout

Units

| Unit ID | Program | Unit Classification | Operating Status | | Source Category | NAICS | Commence Operation Date | Commence Operation Date Code | Comm. Commercial Operation Date | Commence Commericial Operation Date Code | Unit Monitoring Certification Begin Date |
|------------|---------|------------------------|---------------------|---|---------------------|--|-------------------------------|------------------------------------|--|---|---|
| 1 | ARP | Phase 2 | Operating | S | Electric Utility | Fossil fuel electric power generation | | A | 02/22/1992 | A | 06/21/2001 |
| 1 | CAIRNOX | Affected | Operating | S | Utility | Fossil fuel electric power generation | | А | 02/22/1992 | A | 01/01/2008 |
| 1 | CAIROS | Affected | Operating | s | Electric Utility | Fossil fuel electric power | 02/22/1992 | A | 02/22/1992 | Α | 05/01/2008 |

| | 1 | 1 | | } · | } | generation | ł | 1 | | 1 | |
|---|---------|----------|-----------|-----|---------------------|--|------------|---|------------|-----|------------|
| 1 | CAIRSO2 | Affected | Operating | S | Electric Utility | Fossil fuel electric power generation | 02/22/1992 | A | 02/22/1992 | Α | 01/01/2009 |
| 1 | CAMR | Affected | Operating | S | Electric Utility | Fossil fuel electric power generation | 02/22/1992 | A | 02/22/1992 | A | 01/01/2009 |
| 1 | NBP | Affected | Operating | S | Electric Utility | Fossil fuel electric power generation | | A | 02/22/1992 | . A | 05/30/2004 |
| 2 | ARP | Phase 2 | Operating | s | Electric Utility | Fossil fuel electric power generation | 02/22/1992 | Α | 02/22/1992 | A . | 06/21/2001 |
| 2 | CAIRNOX | Affected | Operating | s | Electric Utility | Fossil fuel electric power generation | 02/22/1992 | A | 02/22/1992 | A | 01/01/2008 |
| 2 | CAIROS | Affected | Operating | S | Electric Utility | Fossil fuel electric power generation | 02/22/1992 | A | 02/22/1992 | Α . | 05/01/2008 |
| 2 | CAIRSO2 | Affected | Operating | s | Electric Utility | Fossil fuel electric power generation | 02/22/1992 | A | 02/22/1992 | Α | 01/01/2009 |
| 2 | CAMR | Affected | Operating | S | Electric Utility | Fossil fuel electric power generation | 02/22/1992 | A | 02/22/1992 | A | 01/01/2009 |
| 2 | NBP | Affected | Operating | S | Electric Utility | Fossil fuel electric power generation | 02/22/1992 | A | 02/22/1992 | A | 05/30/2004 |

Generator Information

| Generator ID | Unit ID | ARP Nameplate Capacity | CAIR/CAMR Nameplate Capacity | Effective Date |
|--------------|---------|------------------------|------------------------------|----------------|
| 1 | 2 | 71.1 | 71.1 | 05/31/2007 |
| | | | | |

| CAMD | Business | System |
|----------|-----------------|--------------|
| C1 7141D | Dagiticas | C y S CC III |

1 71.1 71.1 05/31/2007

Basic Table Layout

Current Owners and Operators

| Unit ID | Owner/Operator Company Name | Туре | Effective Date | End Date |
|---------|-----------------------------------|----------|----------------|----------|
| 1 | Dominion Generation | Operator | 03/07/2003 | |
| 1 | Virginia Electric & Power Company | Owner | 06/15/2005 | |
| 2 | Dominion Generation | Operator | 03/07/2003 | |
| 2 | Virginia Electric & Power Company | Owner | 06/15/2005 | |

Basic Table Layout

Attachment B Clean Air Interstate Rule (CAIR) Application Dominion Generation 5000 Dominion Boulevard, Glen Allen, VA 23060



Certified Mail - Return Receipt Requested

June 19, 2007

Mr. David J. Brown
Air Permit Manager
Virginia Department of Environmental Quality
South Central Regional Office
7705 Timberlake Road
Lynchburg, VA 24502

RECEIVED

JAN 28 2008 DEC SCRO

Re:

Dominion - Altavista Power Station Initial CAIR Permit Application DEQ Air Registration No. 30859

Dear Mr. Brown:

Enclosed please find the requested CAIR application documents for Altavista Power Station. A completed CAIR permit application and the appropriate pages of the Form 7 are included. The Certificate of Representation was completed on-line via the CAMD website, so a copy of the Certificate of Representation report has been included for your reference.

If you have any questions, please feel free to contact Dawn Garber at (804) 273-3912 or dawn.k.garber@dom.com.

Sincerely,

Cathy C./Taylor

Director, Environmental Support

Enclosure: Altavista Power Station CAIR permit application



CAIR Permit Application

(for sources covered under a CAIR SIP)

JAN 28 2008

For more information, refer to 40 CFR 98.121, 96.122, 96.221, 96.222, 96.321, and 96.3211 & SCRO

STEP 1 Identify the source by plant name, State, and ORIS or facility code This submission is:
New Revised

Plant Name Dominion – Altavista Power Station State VA ORIS/Facility Code 10773

STEP 2
Enter the unit ID# for each CAIR unit and indicate to which CAIR programs each unit is subject (by placing an "X" in the column)

| Unit ID# | NO _x Annual | SO₂ | NO _x Ozone Season |
|----------|------------------------|-----|------------------------------|
| 1 | х | x | × |
| . 2 | х | . x | х |
| | | , | |
| | | | |
| <u> </u> | | | |
| : | | | |
| | | | |
| , | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | , | | |

STEP 3
Read the standard requirements and the certification, enter the name of the CAIR designated representative, and sign and date

Standard Requirements

(a) Permit Requirements.

(1) The CAIR designated representative of each CAIR NO_x source, CAIR SO₂ source, and CAIR NO_x Ozone Season source (as applicable) required to have a title V operating permit and each CAIR NO_x unit, CAIR SO₂ unit, and CAIR NO_x Ozone Season unit (as applicable) required to have a title V operating permit at the source shall:

(i) Submit to the permitting authority a complete CAIR permit application under §96.122, §96.222, and §96.322 (as applicable) in accordance with the deadlines specified in §96.121, §96.221, and §96.321 (as applicable); and

(ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review a CAIR permit application and issue or deny a CAIR permit.

(2) The owners and operators of each CAIR NO_X source, CAIR SO₂ source, and CAIR NO_X Ozone Season source (as applicable) required to have a title V operating permit and each CAIR NO_X unit, CAIR SO₂ unit, and CAIR NO_X Ozone Season unit (as applicable) required to have a title V operating permit at the source shall have a CAIR permit issued by the permitting authority under subpart CC, CCC, and CCCC (as applicable) of 40 CFR part 96 for the source and operate the source and the unit in compliance with such CAIR permit.

(3) Except as provided in subpart II, III, and IIII (as applicable) of 40 CFR part 96, the owners and operators of a CAIR NO_X source, CAIR SO₂ source, and CAIR NO_X Ozone Season source (as applicable) that is not otherwise required to have a title V operating permit and each CAIR NO_X unit, CAIR SO₂ unit, and CAIR NO_X Ozone Season unit (as applicable) that is not otherwise required to have a title V operating permit are not required to submit a CAIR permit application, and to have a CAIR permit, under subpart CC, CCC, and CCCC (as applicable) of 40 CFR part 96 for such CAIR NO_X source, CAIR SO₂ source, and CAIR NO_X Ozone Season source (as applicable) and such CAIR NO_X unit, CAIR SO₂ unit, and CAIR NO_X Ozone Season unit (as applicable).

Plant Name (from Step 1) Dominion - Altavista Power Station

STEP 3, continued (b) Monitoring, reporting, and recordkeeping requirements.

(1) The owners and operators, and the CAIR designated representative, of each CAIR NO_x source, CAIR SO₂ source, and CAIR NO_x Ozone Season source (as applicable) and each CAIR NO_x unit, CAIR SO₂ unit, and CAIR NO_x Ozone Season unit (as applicable) at the source shall comply with the monitoring, reporting, and recordkeeping requirements of subparts HH, HHH, and HHHH (as applicable) of 40 CFR part 96.

(2) The emissions measurements recorded and reported in accordance with subparts HH, HHH, and HHHH (as applicable) of 40 CFR part 96 shall be used to determine compliance by each CAIR NO_x source, CAIR SO₂ source, and CAIR NO_x Ozone Season source (as applicable) with the CAIR NO_x emissions limitation, CAIR SO₂ emissions limitation, and CAIR NO_x Ozone Season emissions limitation (as applicable) under paragraph (c) of §96.106, §98.206, and §96.306 (as applicable).

(c) Nitrogen oxides emissions requirements.

- (1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO_x source and each CAIR NO_x unit at the source shall hold, in the source's compliance account, CAIR NO_x allowances available for compliance deductions for the control period under §96.154(a) in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO_x units at the source, as determined in accordance with subpart HH of 40 CFR part 96.
- (2) A CAIR NO_x unit shall be subject to the requirements under paragraph (c)(1) of §96.106 for the control period starting on the latter of January 1, 2009 or the deadline for meeting the unit's monitor certification requirements under §96.170(b)(1), (2), or (5) and for each control period thereafter.

(3) A CAIR NO_x allowance shall not be deducted, for compliance with the requirements under paragraph (c)(1) of §96.106, for a control period in a calendar year before the year for which the CAIR NO_x allowance was allocated.

(4) CAIR NO_x allowances shall be held in, deducted from, or transferred into or among CAIR NO_x Allowance Tracking System accounts in accordance with subparts FF, GG, and II of 40 CFR part 96.

(5) A CAIR NO_x allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO_x Annual Trading Program. No provision of the CAIR NO_x Annual Trading Program, the CAIR permit application, the CAIR permit, or an exemption under §96.105 and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.

(6) A CAIR NO_x allowance does not constitute a property right.

(7) Upon recordation by the Administrator under subpart EE, FF, GG, or II of 40 CFR part 96, every allocation, transfer, or deduction of a CAIR NO_x allowance to or from a CAIR NO_x source's compliance account is incorporated automatically in any CAIR permit of the source that includes the CAIR NO_x unit.

Sulfur dioxide emission requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR SO₂ source and each CAIR SO₂ unit at the source shall hold, in the source's compliance account, a tonnage equivalent of CAIR SO₂ allowances available for compliance deductions for the control period under §96.254(a) and (b) not less than the tons of total sulfur dioxide emissions for the control period from all CAIR SO₂ units at the source, as determined in accordance with subpart HHH of 40 CFR part 96.

(2) A CAIR SO₂ unit shall be subject to the requirements under paragraph (c)(1) of §96.206 for the control period starting on the later of January 1, 2010 or the deadline for meeting the unit's monitor certification requirements under §96.270(b)(1), (2), or (5) and for each control period thereafter.

(3) A CAIR SO₂ allowance shall not be deducted, for compliance with the requirements under paragraph (c)(1) of §96.206, for a control period in a calendar year before the year for which the CAIR SO₂ allowance was allocated.

(4) CAIR SO₂ allowances shall be held in, deducted from, or transferred into or among CAIR SO₂ Allowance Tracking System accounts in accordance with subparts FFF, GGG, and III of 40 CFR part 96.

(5) A CAIR SO₂ allowance is a limited authorization to emit sufficiency of the CAIR so₂ Trading Program. No provision of the CAIR SO₂ Trading Program, the CAIR permit application, the CAIR permit, or an exemption under §96.205 and no provision of law shall be construed to limit the authority of the State or the United States to terminate

(6) A CAIR SO₂ allowance does not constitute a property right.

(7) Upon recordation by the Administrator under subpart FFF, GGG, or III of 40 CFR part 96, every allocation, transfer, or deduction of a CAIR SO₂ allowance to or from a CAIR SO₂ source's compliance account is incorporated automatically in any CAIR permit of the source that includes the CAIR SO₂ unit.

Nitrogen oxides ozone season emissions requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall hold, in the source's compliance account, CAIR NO_x Ozone Season allowances available for compliance deductions for the control period under §96.354(a) in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO_x Ozone Season units at the source, as determined in accordance with subpart HHHH of 40 CFR part 96.

(2) A CAIR NO_X Ozone Season unit shall be subject to the requirements under paragraph (c)(1) of §96.306 for the control period starting on the later of May 1, 2009 or the deadline for meeting the unit's monitor certification requirements under §96.370(b)(1), (2), (3) or (7) and for each control period thereafter.

(3) A CAIR NO_x Ozone Season allowance shall not be deducted, for compliance with the requirements under paragraph (c)(1) of §96.308, for a control period in a catendar year before the year for which the CAIR NO_x Ozone Season allowance was allocated

(4) CAIR NO_x Ozone Season allowances shall be held in, deducted from, or transferred into or among CAIR NO_x Ozone Season Allowance Tracking System accounts in accordance with subparts FFFF, GGGG, and IIII of 40 CFR part 96.

(5) A CAIR NO_x allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO_x Ozone Season Trading Program. No provision of the CAIR NO_x Ozone Season Trading Program, the CAIR permit application, the CAIR permit, or an exemption under §96.305 and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.

(6) A CAIR NO_x allowance does not constitute a property right.

(7) Upon recordation by the Administrator under subpart EEEE, FFFF, GGGG, or IIII of 40 CFR part 95, every allocation, transfer, or deduction of a CAIR NO_x Ozone Season allowance to or from a CAIR NO_x Ozone Season source's compliance account is incorporated automatically in any CAIR permit of the source.

Plant Name (from Step 1) Dominion - Altavista Power Station

STEP 3, continued

(d) Excess emissions requirements.

- If a CAIR NO_x source emits nitrogen oxides during any control period in excess of the CAIR NO_x emissions limitation, then:
- (1) The owners and operators of the source and each CAIR NO_x unit at the source shall surrender the CAIR NO_x allowances required for deduction under §96.154(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law, and
- (2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of this subpart, the Clean Air Act, and applicable State law.
- If a CAIR SO₂ source emits sulfur dioxide during any control period in excess of the CAIR SO₂ emissions limitation, then:
- (1) The owners and operators of the source and each CAIR SO₂ unit at the source shall surrender the CAIR SO₂ allowances required for deduction under §96.254(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law; and
- (2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of this subpart, the Clean Air Act, and applicable State law.

If a CAIR NO_x Ozone Season source emits nitrogen oxides during any control period in excess of the CAIR NO_x Ozone Season emissions limitation, then:

- (1) The owners and operators of the source and each CAIR NO_X Ozone Season unit at the source shall surrender the CAIR NO_X Ozone Season allowances required for deduction under §96.354(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law; and
- (2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of this subpart, the Clean Air Act, and applicable State law.

(e) Recordkeeping and Reporting Requirements.

- (1) Unless otherwise provided, the owners and operators of the CAIR NO_x source, CAIR SO_z source, and CAIR NO_x Ozone Season source (as applicable) and each CAIR NO_x unit, CAIR SO_z unit, and CAIR NO_x Ozone Season unit (as applicable) at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the permitting authority or the Administrator.
- (i) The certificate of representation under §96.113, §96.213, and §96.313 (as applicable) for the CAIR designated representative for the source and each CAIR NO_x unit, CAIR SO₂ unit, and CAIR NO_x Ozone Season unit (as applicable) at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under §96.113, §96.213, and §96.313 (as applicable) changing the CAIR designated representative.
- (ii) All emissions monitoring information, in accordance with subparts HH, HHH, and HHHH (as applicable) of 40 CFR part 96, provided that to the extent that subparts HH, HHH, and HHHHH (as applicable) of 40 CFR part 96 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
- (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO_x Annual Trading Program, CAIR SO₂ Trading Program, and CAIR NO_x Ozone Season Trading Program (as applicable).
- (iv) Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR NO_X Annual Trading Program, CAIR SO₂ Trading Program, and CAIR NO_X Ozone Season Trading Program (as applicable) or to demonstrate compliance with the requirements of the CAIR NO_X Annual Trading Program, CAIR SO₂ Trading Program, and CAIR NO_X Ozone Season Trading Program (as applicable).
- (2) The CAIR designated representative of a CAIR NO_x source, CAIR SO₂ source, and CAIR NO_x Ozone Season source (as applicable) and each CAIR NO_x unit, CAIR SO₂ unit, and CAIR NO_x Ozone Season unit (as applicable) at the source shall submit the reports required under the CAIR NO_x Annual Trading Program, CAIR SO₂ Trading Program, and CAIR NO_x Ozone Season Trading Program (as applicable) including those under subparts HH, HHH, and HHHH (as applicable) of 40 CFR part 96.

(f) Liability.

- (1) Each CAIR NO_x source, CAIR SO₂ source, and CAIR NO_x Ozone Season source (as applicable) and each NO_x unit, CAIR SO₂ unit, and CAIR NO_x Ozone Season unit (as applicable) shall meet the requirements of the CAIR NO_x Annual Trading Program, CAIR SO₂ Trading Program, and CAIR NO_x Ozone Season Trading Program (as applicable).
- (2) Any provision of the CAIR NO_x Annual Trading Program, CAIR SO₂ Trading Program, and CAIR NO_x Ozone Season Trading Program (as applicable) that applies to a CAIR NO_x source, CAIR SO₂ source, and CAIR NO_x Ozone Season source (as applicable) or the CAIR designated representative of a CAIR NO_x source, CAIR SO₂ source, and CAIR NO_x Ozone Season source (as applicable) shall also apply to the owners and operators of such source and of the CAIR NO_x units, CAIR SO₂ units, and CAIR NO_x Ozone Season units (as applicable) at the source.
- (3) Any provision of the CAIR NO_x Annual Trading Program, CAIR SO₂ Trading Program, and CAIR NO_x Ozone Season Trading Program (as applicable) that applies to a CAIR NO_x unit, CAIR SO₂ unit, and CAIR NO_x Ozone Season unit (as applicable) or the CAIR designated representative of a CAIR NO_x unit, CAIR SO₂ unit, and CAIR NO_x Ozone Season unit (as applicable) shall also apply to the owners and operators of such unit.

Plant Name (from Step 1) Dominion - Altavista Power Station

STEP 3. continued

(g) Effect on Other Authorities.

No provision of the CAIR NO_x Annual Trading Program, CAIR SO₂ Trading Program, and CAIR NO_x Ozone Season Trading Program (as applicable), a CAIR permit application, a CAIR permit, or an exemption under § 96,105, §96,205, and §96,305 (as applicable) shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO_x source, CAIR SO₂ source, and CAIR NO_x Ozone Season source (as applicable) or CAIR NO_x unit, CAIR SO₂ unit, and CAIR NO_x Ozone Season unit (as applicable) from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.

Certification

I am authorized to make this submission on behalf of the owners and operators of the source or units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

| | | <u>.</u> | | | | |
|---------|----------------|-----------|------|----------|--------|------|
| Name | J. David Rives | | | | | |
| 4. | | | | 1 | | |
| Signatu | re | · AND ELE | | Date UNS | 18 Ø / | |



RECEIVED

Reports and Queries Certificate of Representation 12/28/2007

JAN 28 2008 DEQ SCRO

Facility Information

Facility ID (ORISPL): 1077

Facility Altavista Power Name: Station

State: VA

Tribal Land:

County: Campbell

EPA AIRS 5103100156

Latitude: 37.1189

Longitude:

9.2753

Facility Detail (Mini Detail)

Representative Information

Name: Donald C Craft

Company: Virginia Electric & Power Company

Title: Station Director

Address: VA 23060

Phone: (804) 273-5062

Fax: (804) 273-2433

Alternate:

Email: donnie.craft@dom.com

Name: Charles D Holley

Company: Dominion Resources Services, Inc

Title: VP, Fossil & Hydro, System Ops

Address: VA 23060

Phone: (804) 273-3592

Fax: (804) 273-2433

Alternate:

Email: doug.holley@dom.com

People Detail Layout (Multiple)

Current Representatives

| Program | Primary Representative, Effective Date | Alternate Representative, Effective Date | Primary Representative, End Date | Alternate Representative, End Date |
|---------|---|---|-------------------------------------|---------------------------------------|
| ARP | Charles D Holley, 12/26/2007 | Donald C Craft, 06/16/2006 | · | |
| CAIRNOX | Charles D Holley, 12/26/2007 | Donald C Craft, 05/31/2007 | | |
| CAIROS | Charles D Holley, 12/26/2007 | Donald C Craft, 05/31/2007 | | • |
| CAIRSO2 | Charles D Holley, 12/26/2007 | Donald C Craft, 05/31/2007 | | |
| CAMR | Charles D Holley, 12/26/2007 | Donald C Craft, 08/16/2007 | | |
| NBP | Charles D Holley, 12/26/2007 | Donald C Craft, 06/16/2006 | | |

Basic Table Layout

Units

| Unit ID | Program | Unit Classification | Operating Status | | Source Category | NAICS Code | Commence Operation Date | Commence Operation Date Code | Comm. Commercial Operation Date | Commence Commericial Operation Date Code | Unit Monitoring Certification Begin Date |
|------------|---------|------------------------|---------------------|---|--------------------|--|-------------------------------|------------------------------------|--|---|---|
| 1 | ARP | Phase 2 | Operating | S | Utility | Fossil fuel electric power generation | 02/22/1992 | A | 02/22/1992 | A | 06/21/2001 |
| 1 | CAIRNOX | Affected | Operating | S | | Fossil fuel electric power generation | | Α | 02/22/1992 | A | 01/01/2008 |
| 1 | CAIROS | Affected | Operating | S | Utility | Fossil fuel electric power | 02/22/1992 | A | 02/22/1992 | Α | 05/01/2008 |

| | | | | | | generation | | | · | | |
|---|---------|-----------------------|-----------|----|-----------------------|--|------------|----------|------------|-----|------------|
| 1 | CAIRSO2 | Affected | Operating | S | Electric Utility | Fossil fuel electric power generation | 02/22/1992 | Α | 02/22/1992 | A | 01/01/2009 |
| 1 | CAMR | Affected | Operating | s | Electric Utility | Fossil fuel electric power generation | 02/22/1992 | A | 02/22/1992 | A | 01/01/2009 |
| 1 | NBP | Affected | Operating | S | Electric Utility | Fossil fuel electric power generation | | A | 02/22/1992 | A | 05/30/2004 |
| 2 | ARP | Phase 2 | Operating | S | Electric Utility | Fossil fuel electric power generation | 02/22/1992 | A | 02/22/1992 | A· | 06/21/2001 |
| 2 | CAIRNOX | Affected [*] | Operating | s | Electric Utility | Fossil fuel electric power generation | 02/22/1992 | А | 02/22/1992 | Α | 01/01/2008 |
| 2 | CAIROS | Affected | Operating | S | Electric Utility ' | Fossil fuel electric power generation | 02/22/1992 | A | 02/22/1992 | A . | 05/01/2008 |
| 2 | CAIRSO2 | Affected | Operating | S | Electric Utility | Fossil fuel electric power generation | | A, | 02/22/1992 | A | 01/01/2009 |
| 2 | CAMR | Affected . | Operating | s | Electric Utility | Fossil fuel electric power generation | | A | 02/22/1992 | Α | 01/01/2009 |
| 2 | NBP | Affected | Operating | S. | Electric Utility | Fossil fuel electric power generation | 02/22/1992 | A | 02/22/1992 | A | 05/30/2004 |

Basic Table Layout

Generator Information

| Generator ID | Unit ID | ARP Nameplate Capacity | CAIR/CAMR Nameplate Capacity | Effective Date |
|--------------|---------|------------------------|------------------------------|----------------|
| 1 | 2 | 71.1 | 71.1 | 05/31/2007 |
| | | | | - |

1 71.1 71.1 05/31/2007

Current Owners and Operators

| Unit ID | Owner/Operator Company Name | Туре | Effective Date | End Date |
|---------|-----------------------------------|----------|----------------|----------|
| 1 | Dominion Generation | Operator | 03/07/2003 | |
| 1 | Virginia Electric & Power Company | Owner | 06/15/2005 | |
| 2 | Dominion Generation | Operator | 03/07/2003 | |
| 2 | Virginia Electric & Power Company | Owner | 06/15/2005 | • |

Basic Table Layout

COMMONWEALTH OF VIRGINIA Department of Environmental Quality



RECEIVED

JAN 28 2008 JEW SCRO

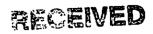
General information CHECK ALL FORMS THAT APPLY AND LIST ALL ATTACHED DOCUMENTS.

| | MAP AND LOCALITIES LIS | T (information), Pages III-VI | PAST ACTUAL ANNUAL CRITERIA POLLUTANT EMISSIONS, Page |
|------------------|--|---|---|
| | CONFIDENTIAL INFORMAT | 10N, Pago vii-vlii | TOVIC OF USE ENJOCIOUS Pros SE |
| | FORMULA-BASED HAZARI | OOUS AIR POLLUTANT INFORMATION, Page ix | _ TOXIC OR HAP EMISSIONS, Page 16 |
| | HAZARDOUS AIR POLLUT | ANT LIST (Information), Pages xi-xii | _ OTHER REGULATED EMISSIONS, Page 17 |
| | _ REDUEST FOR LOCAL GO | VERNMENT CERTIFICATION FORM, Page xill | OPERATING PERIODS, Page 18 |
| | 1 CONTENTS AND DOCUM | MENT CERTIFICATION, Page 1 | LISY ATTACHED DOCUMENTS |
| | GENERAL INFORMATION | t. Pago 2 | _ MAP OF SITE LOCATION |
| | GENERAL INFORMATION | (continued), Page 3 | FACILITY SITE PLAN |
| | _ FUEL-BURNING EQUIPMEN | YY, Page 4 | _ PROCESS FLOW DIAGRAM/SCHEMATIC |
| | PROCESSING, Page 5 | | _ MSDS or CPDS SHEETS |
| | _ INKS, COATINGS, STAINS | , AND ADHESIVES, Page 6 | _ ESTIMATED EMISSIONS CALCULATIONS |
| | _ INCINERATORS, Pogo 7 | · | _ STACK TESYS |
| | VOLATILE DRIGANIC COM | POUND/PETROLEUM STORAGE TANKS, Page 8 | _ AIR MODEL DATA |
| | _ VOLATILE ORGANIC COM CONTINUED, Page 9 | POUND/PETROLEUM STORAGE TANKS | <u> </u> |
| | LOADING RACKS AND OIL | -WATER SEPARATORS, Page 10 | <u> </u> |
| | STACK PARAMETERS AN | D FUEL DATA, Page 11 | · . |
| | _ AIR POLLUTION CONTROL | L AND MONITORING EQUIPMENT, PAGE 12 | |
| | _ AIR POLLUTION CONTROL | L/SUPPLEMENTAL INFORMATION, PAGE 13 | |
| eva per my | ction or supervisio luate the information sons directly respo knowledge and bei | n in accordance with a system desig on submitted. Based on my inquiry on sible for gathering and evaluating the | for instructions) d all attachments [as noted above] were prepared under my ned to assure that qualified personnel properly gather and of the person or persons who manage the system, or those he information, the information submitted is, to the best of am aware that there are significant penalties for submitting |
| | rce from potential | enforcement of any regulation of to | nrmit under [Article 6 of the Regulations] does not shield the he board governing the major NSR program and does not applicable provision of the major NSR regulations. |
| SIG | NATURE: | Dongo | DATE: JUNE 18, 2607 |
| NAM | 1E: | J. David Rives | |
| TITL | E: | VP Fossil & Hydro | REGISTRATION |
| COM | IPANY: | _Dominion - Altavista Power Station | NUMBER: 30859 |
| Refe | rences: Virginia Regulat | tions for the Control and Abatement of Air Poll | ution (Regulations), 9 VAC 5-20-230B and 9 VAC 5-80-1140E. See reverse |

of this form for Instructions.

COMMONWEALTH OF VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY AIR PERMIT APPLICATION GENERAL INFORMATION

| PERSON COMPLETING F | DATE | REGISTRATION NUMBER | | | | | |
|---|---|----------------------|---------------------------------------|--|--|--|--|
| Dawn Garber June 2007 30859 | | | | | | | |
| | | | | | | | |
| REASON(S) FOR SUBMISSION (Check all that apply): | | | | | | | |
| X STATE OPERATING PERMIT T | X STATE OPERATING PERMIT THIS PERMIT IS APPLIED FOR PURSUANT TO PROVISIONS OF THE | | | | | | |
| <u></u> | IRGINIA ADMINISTRATIVE C | DDE, 9 VAC 5 Char | ter 80, Article 5 (SOP) | | | | |
| NEW (Greenfield) SOURCE T | HIS PERMIT IS APPLIED FO | B DIRECTIVATE OF THE | | | | | |
| | OLLOWING PROVISION(S) OF | | | | | | |
| MODIFICATION of a SOURCE | 9 VAC 5 Chapter 80, | Art. 6 (MINOR BO) | TRCES) | | | | |
| , | 9 VAC 5 Chapter 80, | Art. 8 (PSD MAJO | R SOURCES) | | | | |
| RELOCATION of a SOURCE | 9 VAC 5 Chapter 80, | Art. 9 (NON-ATTA | INMENT MAJOR SOURCES) | | | | |
| | | | | | | | |
| Non-Binding Letter of EXEM | PTION | | | | | | |
| AMENDMENT to a Permit dated | l: Permit | type: SOP (| Art.5) NSR (Art.6) | | | | |
| Amendment Type: | HIS AMENDMENT IS REQUEST | ED PURSUANT TO TH | E PROVISIONS OF: | | | | |
| Administrative Amendment | 9 VAC 5-80-970 (80) | Adm.)9 VA | C 5-80-1270 (NSR Adm.) | | | | |
| minor Amendment | 9 VAC 5-80-980 (SOP | Minor) 9 VA | C 5-80-1280 (NSR Minor) | | | | |
| significant Amendment | 9 VAC 5-80-990 (SO | sig.) 9 VA | C 5-80-1290 (NSR. Sig.) | | | | |
| Complete Pages 1, 2, and 3 and refer to the above checked provisions for additional information requirements. Form 7 pages may be used to satisfy those requirements. | | | | | | | |
| Notification of Change in | Ownership - Effective | Date: | | | | | |
| Notification of Facility No | ame Change - Effecti | ve Date: | | | | | |
| Notification of Owner Name | Change - Effective 1 | Date: | | | | | |
| | | | | | | | |
| Other (Specify): | | | | | | | |
| COMPANY AND DIVISION MARKE. | | | | | | | |
| COMPANY AND DIVISION NAME: Dominion - Altavista Power Station | n | | | | | | |
| MAILING ADDRESS: | | | · · · · · · · · · · · · · · · · · · · | | | | |
| 5000 Dominion Boulevard, Glen Al | len, VA 23060 | | | | | | |
| | MBER OF EMPLOYEES AT SITE: | PROPERT | Y AREA AT SITE: | | | | |
| 804-369-7805 | • | | | | | | |
| EXACT SOURCE LOCATION - INCLUDE NAME OF C | CITY (COUNTY) AND FULL STRE | ET ADDRESS OR DIRE | CTIONS: | | | | |
| 104 Wood Lane, Altavista, VA 24517 | | | | | | | |
| PERSON TO CONTACT ON AIR POLLUTION MATTERS - NAME AND TITLE: PHONE NUMBER: 804-273-2929 | | | | | | | |
| Cathy C. Taylor FAX NUMBER: 804-273-3410 | | | | | | | |
| Director, Environmental Support E-MAIL ADDRESS: | | | | | | | |
| Cathy.C.Taylor@dom.com | | | | | | | |
| X Please check here if you obtained this form from the DEQ website. | | | | | | | |
| | FOR OFFICIAL USE ONLY | | | | | | |
| COUNTY CODE: PLA | NT ID NUMBER: | LAT/LON | G: | | | | |



JAN 28 2008 FORM 7

COMMONWEALTH OF VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY AIR PERMIT APPLICATION GENERAL INFORMATION (continued)

JAN 28 2008

| COMPANY NAME | | DAIL | REGISTRATION NUMBER |
|---|-------------------------------|--------------------|------------------------------------|
| Dominion - Altavista Power Station | , | June 2007 | 30859 |
| FOR PORTABLE PLANTS: | | | |
| IS THIS FACILITY DESIGNED TO BE PORTABLE? | | YES X NO | |
| - IF YES, IS THIS FACILITY ALREADY PERMITTED | AS A PORTABLE PLANT? | YES NO | PERMIT DATE: |
| IF NOT PERMITTED, IS THIS AN APPLICATION TO BE PLANT? | PERMITTED AS A PORTABLE | YES | NO |
| IF PERMITTED AS A PORTABLE FACILITY, IS THIS A - DESCRIBE THE NEW LOCATION OR ADDRESS (II | | N? YES | NO |
| - WILL THE PORTABLE FACILITY BE CO-LOCATED | WITH ANOTHER SOURCE? | YES | NO REG. NO.: |
| - WILL THE PORTABLE FACILITY BE MODIFIED OF | R RECONSTRUCTED AS A RESU | JLT OF THE RELOCA | TION? YES NO |
| - WILL THERE BE ANY NEW EMISSIONS OTHER T | HAN THOSE ASSOCIATED WIT | TH THE RELOCATION | YES NO |
| - IS THE FACILITY SUITABLE FOR THE AREA TO V DOCUMENTATION.) | WHICH IT WILL BE LOCATED? | (ATTACH | YES NO |
| DESCRIBE THE PRODUCTS MANUFACTURE | ED AND/OR SERVICES PE | RFORMED AT T | HIS FACILITY: |
| Generation of electricity for sale | · · | | |
| deneration of electricity for sale | | | • |
| • | | | |
| · | | | |
| IST THE STANDARD INDUSTRIAL CLASSIFICATION IS | IC) CODE(S) FOR THE FACILITY: | | |
| IST THE NORTH AMERICAN INDUSTRY CLASSIFICATION 2 2 1 1 1 2 | ON SYSTEM (NAICS) CODE(S) F | OR THE FACILITY: | |
| PLEASE LIST ALL THE FACILITIES IN VIRGIN FACILITY: | IA UNDER COMMON OW | NERSHIP OR COI | NTROL BY THE OWNER OF TH |
| Numerous facilities throughout the eastern | 2/3 of Virginia | | |
| | | | |
| MILESTONES. This section is to be completed if modification to existing operations. | the permit application inclu | des a new emissio | ons unit or |
| MILESTONES* | STARTING DATE | ESTI | MATED COMPLETION DATE |
| New equipment installation | | | |
| Modification of existing process or equipment | | | |
| Start-up dates | | | |
| *For new or modified installations to be construct | ed in pheed schedule give | construction/insta | lletion starting and completion de |

for each phase.

ATTACHMENT C – SOURCE TESTING REPORT FORMAT

Report Cover

- 1. Plant name and location
- 2. Units tested at source (indicate Ref. No. used by source in permit or registration)
- 3. Test Dates.
- 4. Tester; name, address and report date

Certification

- 1. Signed by team leader/certified observer (include certification date)
- 2. Signed by responsible company official
- 3. *Signed by reviewer

Copy of approved test protocol

Summary

- 1. Reason for testing
- 2. Test dates
- 3. Identification of unit tested & the maximum rated capacity
- 4. *For each emission unit, a table showing:
 - a. Operating rate
 - b. Test Methods
 - c. Pollutants tested
 - d. Test results for each run and the run average
 - e. Pollutant standard or limit
- 5. Summarized process and control equipment data for each run and the average, as required by the test protocol
- 6. A statement that test was conducted in accordance with the test protocol or identification & discussion of deviations, including the likely impact on results
- 7. Any other important information

Source Operation

- 1. Description of process and control devices
- 2. Process and control equipment flow diagram
- 3. Sampling port location and dimensioned cross section Attached protocol includes: sketch of stack (elevation view) showing sampling port locations, upstream and downstream flow disturbances and their distances from ports; and a sketch of stack (plan view) showing sampling ports, ducts entering the stack and stack diameter or dimensions

Test Results

- 1. Detailed test results for each run
- 2. *Sample calculations
- 3. *Description of collected samples, to include audits when applicable

Appendix

- 1. *Raw production data
- 2. *Raw field data
- 3. *Laboratory reports
- 4. *Chain of custody records for lab samples
- 5. *Calibration procedures and results
- 6. Project participants and titles
- 7. Observers' names (industry and agency)
- 8. Related correspondence
- 9. Standard procedures